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American Conference of Pharmaceutical Faculties and National Association of Boards of Pharmacy will also convene in Indianapolis, dates of Convention to be named

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GLENDORA, CAL.

JOHN H. DAWSON

JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION

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JOHN H. DAWSON.

John Henry Dawson was born in New York City in 1852. He was apprenticed at an early age to Edwin Rulon, a well known pharmacist of his day, in Brooklyn. His compensation was only $50.00 for the first year and twice that sum for the next year! What would the apprentice say to that now? Besides, the work began very early in the morning and continued until late at night. From Rulon's he went to Parrish's at Philadelphia. Edward Parrish occupied the Chair of Pharmacy in the Philadelphia College of Pharmacy at that time, and from this institution the subject of this sketch graduated in 1872. He returned to New York after graduating and was behind the dispensing counter in Alexander Hudnut's Pharmacy at 218 Broadway until 1875, when he came to San Francisco.

Mr. Dawson at once identified himself with pharmacy of the Pacific Coast, and also with other business interests and took a more or less active part in municipal and state affairs. He first engaged in business for himself at Twenty-third and Valencia streets and conducted this successfully until it was merged into a chain of stores of the Union Drug Company. Mr. Dawson was active in the enactment of the California Pharmacy Law and was appointed a member and also elected secretary of the first California Board of Pharmacy. He was until last year a director of the California College of Pharmacy, and its president for two years.

In 1905, Mr. Dawson was appointed special examiner of drugs at the port of San Francisco, and retained that position until the office was discontinued. For eight years he was also U. S. Inspector for California, in a position requiring the polarization of all beet sugar produced in the State.

In 1916, after leaving the Government service, Mr. Dawson went to Southern California and purchased a pharmacy at Glendora, where he lives, happy amid the orange groves, with his wife, formerly Miss Hattie West of Brooklyn, and a daughter. Besides being a life member of the American Pharmaceutical Association, Mr. Dawson also has fraternity connections, is a member of the pharmaceutical bodies, a member of the California Chemical Society, California Institute of Art, Olympic Club, etc.

The substance of this sketch was furnished by a classmate and friend of many years who concludes by saying "that the esteem in which Mr. Dawson has always been held by his associates is great, and proven by the hosts of friends in the State of his adoption, and in the autumn of his life, his activities, his interest in his profession is just as strong with him as in the days when in the vigor of youth he exercised with the pestle at Rulon's and Hudnut's."

EDITORIAL

E. G. EBERLE, Editor 253 Bourse Bldg., PHILADELPHIA

DOING ONE'S BIT.

RARELY in the sixty-four years of the life of our Association has there been more discussion of the problems related to its welfare than during the past few months. Such discussion is either good for the Association, or bad for it, according to the spirit in which it is conducted. If it is constructive criticism, it will be of great service; if it is captious fault-finding, unaccompanied by a genuine effort to aid in making our Association what it should be, it is a waste of both time and energy.

This is not the time to discuss criticism that is mere nagging. Honest differences of opinion concerning the momentous problems that are now before those responsible to the membership at large for the welfare of the Association is in itself a healthy sign. That these differences are being solved is the best guarantee of the future of our well-beloved organization. But it is equally true that the problems will not be solved by the Council unless each individual member considers it his duty to "do his bit" in helping the officers and the members of the Council.

There is no getting away from the fact that each of us gets for his annual subscription a larger return for his investment than on any similar sum spent elsewhere. Some feel we are getting too much but this point we will pass over in order to emphasize the important fact that the ability of the Association to continue giving the splendid return now afforded each member depends entirely on how fully each member realizes his responsibility in promoting the welfare of our Association.

The two greatest needs of the Association at this time are: first, an increased membership; second, a more liberal patronage of the advertising pages of our JOURNAL. These two needs will not down and were the first solved; the second would almost reach the vanishing point. There is no reason why our Association should not eventually have fifteen thousand members.

During the past year one local Branch of our Association, thanks to the energy of the chairman of the Membership Committee, backed by his enthusiastic colleagues, was able in a single year, to increase the A. Ph. A. membership of its district by fifty percent. If every Branch and every unattached member of our Association did likewise we would have 4,000 members by 1918.

As to the advertising side of our JOURNAL, each increase in our membership (subscriber) list means an increased value of our JOURNAL as a publicity medium. When we consider the type of pharmacy represented in our membership; when we realize that the censorship rules of the JOURNAL bar any advertisement except those of the highest grade, we will appreciate that in its field the JOURNAL'S ad-

vertising pages are as desirable a means of publicity as are the pages of *Harper's Magazine* or of the *Independent*. There are a lot of magazines that have a wider circulation than the two publications just mentioned and yet there is little doubt as to the decision of the discriminating advertising man if he were asked which was the best publicity medium, one of those mentioned or one that reaches an indifferent or unproductive class of readers, even though the latter publication might have the circulation of one million.

It behooves each of us who is a member of the American Pharmaceutical Association to point out to friends who are advertisers but who have not yet decided to patronize the pages of the JOURNAL, the unusual merits of our publication as an advertising medium. We have members in every part of this great country of ours. If each of us would consider himself an advertising agent to the extent of bringing one acceptable contract for the JOURNAL there would be no question as to the financial ability of our Association to furnish its members with the splendid *quid pro quod* that now obtains.

In this editorial, the word "we" is not used in the customary journalistic sense. It is not used as the device originated by modest representatives of the Fourth Estate to conceal the personality of the shy individual occupying an editorial chair. On this page of the JOURNAL of this our much loved Association, "we" should mean each one of our 2,700 members working in harmonious coöperation not merely to keep our organization up to the glorious traditions of its past, but, if that is possible, to even broaden the scope of its influence and of its service.

H. V. ARNY.

OUR PATENT LAWS SHOULD BE AMENDED.

IN this issue of the JOURNAL will be found two papers dealing with American patent laws and relating to patent-protection of chemical compounds. Comment on the subject would be a mere attempt to repeat the excellent presentations by Messrs. F. E. Stewart and J. W. England, so the only purpose of this writing is to emphasize a point or two that has been developed. American citizens are entitled to the same consideration given by foreign manufacturers to those of other countries. Unless the United States exacts contributions that create a larger expense for these manufacturers than obtains in other countries, then it should be possible for the dealers of the United States to procure these chemicals at practically the same prices paid by those of other countries. It is admitted that manufacturers have the right to exact whatever price purchasers will pay for their products, but by the same or better reasoning the latter may use every means at their command, and not in violation of right and law, to buy at the lowest possible prices.

American pharmacists may conclude that it matters not what an article costs them, they figure profits on cost. As a matter of fact if the products referred to

could be obtained at prices charged for them in other countries, there would be the possibility of larger relative profit. But the fact remains that there is no plausible reason, as far as we can see, why citizens of the United States should pay relatively more than Canadians for the very same articles. It, therefore, devolves upon dealers to protect their patrons against excessive charges, if this is possible. In other words, even if it matters not whether the price is one dollar or twenty cents to the pharmacists, that the consumers pay the profit, there still obtains the duty of protecting the latter, if it is possible so to do. So then, the first reason for a correction of our patent laws in this respect is in the interest of the consumers.

The second consideration is for the American manufacturers and development of our chemical industries. Our first duty should be a consideration of our own manufacturers. According to our views the product-protection of chemical compounds hinders the development of the American chemical industries. We should have reciprocity along these lines and make the same or like demands upon foreign manufacturers that their respective countries require of American manufacturers. In the final analysis this may be found somewhat impracticable, for trade between countries must be continued on a satisfactory basis, but it is beginning to dawn on everyone concerned that the relation has not been the proper one, and that an adjustment is mandatory. There may also be certain agreements between the United States and foreign countries that will require adjudication, but certainly the condition now existing can not be a permanent one, and is subject to arrangement.

The chemical industries of this country have received an impetus and their development should be encouraged in every possible way. Congress should, in furthering these interests, give serious attention to amending the patent laws and provide means for constant, proper supervision so that the citizens will be protected against discrimination, and the American manufacturers further encouraged in the development of the chemical industries.

Pharmacists have in the furtherance of this legislation an opportunity to serve their patrons with profit to themselves, promoting American chemical industries and benefiting pharmacy. Read the contributed articles carefully and then correspond or confer with your senators and congressmen. E. G. E.

THE NATIONAL DRUG TRADE CONFERENCE.

FOR a fund of useful information anent national legislation, the readers are referred to the report of the National Drug Trade Conference held in Washington, January 16th, reported by Secretary Charles M. Woodruff and printed in this issue of the JOURNAL.

The Conference has unanimously endorsed the Kern-Doremus poison-mailing bill, which provides for carrying drugs of all kinds through the mails, with proper safeguards written into the law. The Post-office Department is endeavoring to pass a measure which seeks to restrict the traffic by mail to responsible parties.

The former provides restrictions in accord with the character and strength of the drug, and the other places the responsibilities on the senders and recipients.

The only amendment recommended for the Harrison Law is that of Section 8, which would make it unlawful for a person, not registered under the law, to have in his possession the proscribed drugs and making possession under such conditions *prima facie* evidence of violation.

The Conference, while recognizing the importance of Compulsory Health Insurance, recommends that legislatures be importuned not to be hasty in passing measures of this kind, until the subject can be carefully studied from every angle by commissions specially appointed for thoroughly investigating the question.

The usefulness of the Drug Trade Conference is becoming more and more apparent, composed as it is of representative members of the various drug trade organizations. Its influence for good is a factor not only in properly shaping legislation, but for bringing about desired coöperation between these interests.

E. G. E.

THE NATIONAL ASSOCIATION OF BOARDS OF PHARMACY AND PHARMACY LEGISLATION.

UNDER Pharmacist and the Law we are presenting some of the recommendations of the National Association of Boards of Pharmacy in the promotion of uniformity in pharmacy laws. The sentiment is growing that boards of pharmacy should act in harmony in the matter of college graduation prerequisite, not only as a necessary progressive step, but because it will bring about a more uniform standard in board examinations.

The public is entitled to know who the owner of a pharmacy is; it is equally as important information, as knowing the name of a physician into whose care patients give themselves; the same thought applies in a relative degree to registered pharmacists.

The provision, requiring the display of certificates of registration and also of the names of the registered pharmacist in charge of drug stores is advocated by the Association, and the requirement should be made part of every pharmacy law.

Another point brought out by Secretary H. C. Christensen is that the United States Pharmacopoeia and National Formulary being essential to the proper conduct of a pharmacy, the law should make it mandatory that copies of the latest revisions be in every drug store. This may seem a superfluous inclusion, but the fact remains that some druggists do not use these standards as their guide in pharmaceutical manufacturing and dispensing. Even medical laws should require that the U. S. Pharmacopoeia and National Formulary be in the offices of practicing physicians. These standards are certainly necessary for intelligent and careful prescribing.

E. G. E.

THE PRODUCT-PROTECTION OF CHEMICAL COMPOUNDS.*

BY J. W. ENGLAND.

The crux of the situation with reference to the patent-protection of chemical compounds, more particularly the synthetics, in this country, is to be found in our system of *product-protection*. We not only permit the copyrighting of the title of a chemical compound and the patenting of the process for making it, but —and this is the vital point—we permit the first inventor to patent the product *as such* and thereby estop all future inventors from marketing the same product no matter how made.

It is hardly necessary, at this time, to cite examples of the thousands of synthetical compounds that are made in Germany and process-patented and product-patented in this country, but, for illustration, we shall call one of these "X," and it is a widely used compound. Prior to the European conflict "X" sold in this country for about 40 or 50 cents an ounce (wholesale) while the price in London was equivalent to about 8 or 10 cents an ounce. To-day, war conditions prevail and a comparison of prices cannot be made.

Personally, I have no criticism to make of the "X" owners for exacting the highest price possible they can of the American public, even if this price is four times as much as that asked for the same compound in Great Britain. They are clearly within their legal rights in so doing. But I do blame the American public for not demanding a revision of the patent laws insofar, at least, as relates to the product-protection of chemical compounds, *because the law prevents the growth and development of an American industry.*

"X" cannot be marketed and sold in this country except by the owners of the patent, who have product-patented the compound, even if it be made by an entirely new and original process of manufacture and the process has been patented; this has been decided by the Federal Courts.

But in Germany for example, "product patents" are not recognized, and "X" can be made by any other process than that used originally for making it and can be marketed.

Under the U. S. patent laws no one but the owners of "X" can market and sell it in this country, and as these owners alone have the monopoly of sale, they can fix the selling price. American manufacturers generally might make this compound by new and original processes, but under the consistent rulings of our courts they could not sell the product they made in this country; they could make and sell it in Germany.

The U. S. Patent Laws as applied to chemical compounds are in need of radical revision if the growth of the organic chemical industry of this country is to be promoted. These laws have not been revised for years and are distinctly inferior in their protection of native industries to the patent laws of foreign countries.

The patent laws of our country should be amended to provide:

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* Read before the Philadelphia Branch, American Pharmaceutical Association, January 17, 1917.

(1) That no grant of American patents be made to citizens of foreign nations unless the foreign nation represented grants similar patents to American citizens.

(2) That no grant of American patents to citizens of foreign nations be made except by agreement that the patented invention be manufactured in this country and within two years of date of letters-patent.

(3) That all patent grants be limited to processes, machinery and apparatus, leaving the products themselves uncontrolled.

In other words, our system of patenting "products" should be abolished or limited. It should be remembered that a chemical compound differs fundamentally from a piece of machinery in that it has an exclusive individuality. There are no two of a kind. A piece of machinery has individuality, also, but it is not exclusive. Any number of pieces of machinery may be devised to perform the same function. Hence it would seem reasonable that the inventor of a process patent of a compound should have product-protection, but the door should not be closed to new inventions. The Commissioner of Patents should be authorized to "suspend" the life of a "product patent" if it can be demonstrated that the product can be made by an entirely new and original process, and it might be desirable to provide, also, that the inventor of the new process shall pay the original inventor an equitable royalty (to be determined by the Commissioner of Patents) so long as the "life" of the *process patent* of the original invention lasts. In this way, the original inventor could lose no property rights, if he has any.

(4) That capital in the development of new inventions relating to synthetic chemical compounds be protected as provided in the German Patent Law, which reads as follows:

"If the invention relates to a process for the production of a new substance, all substances of like nature are considered as having been made by the patented process until proof to the contrary is given." This means that the burden of proof legally is upon the new inventor.

(5) That the copyright, patent and trademark laws be amended to specifically state that the generic titles of medicines are not copyrightable or patentable. Circular No. 19 issued by the Librarian of Congress gives copyright information, but it is not a part of the law. It reads as follows:

"Copyright laws contain no provisions under which protection can be obtained under a mere name or title. Entry can not, therefore, be made in the Copyright Office for coined names; names of articles of manufacture; names of games or puzzles; names of substances; names of products or names of medicines."

(6) That the use of trademarks for the purpose of distinguishing between "brands" of articles of commerce is under proper conditions, both legitimate and commendable, as it promotes superiority in the manufacture of products of a like kind.

Doubtless, some improvement could be had by a better enforcement of existing laws.

The business of the U. S. Patent Office is ably and skillfully handled, but it is largely governed, as it must be, by the decisions of courts of law and by precedent.

The determination of patent questions is a technical and scientific matter, and the greatest obstacle in the way of patent reform is the ignorance of the legal

fraternity, including both the Bench and the Bar, in the sciences of medicine, pharmacy and chemistry and the arts or technical applications of the same.

Take the Adrenalin Case for example. The Court frankly confessed itself incompetent to pass a correct judgment, but as the law provided no way whereby the Court could call on expert advice, it was forced to do the best it could.

Unquestionably, when the issues of a patent case bear upon technical or scientific knowledge and judgment, as do many patent cases, the law should provide a method, both for legal and administrative work, whereby a technical expert or referee or board of referees, could be called upon to examine the evidence and report findings of facts, at the expense of the Federal Government. The Government employs lawyers to pass upon technical questions of law; why should it not employ technical referees to assist the court to pass judgment upon questions beyond the ability of court and jury to properly understand?

If this were done, the technical and scientific defects of patent legislation would be disclosed and remedial measures could be readily adopted.

A DISCUSSION OF THE PAIGE BILL, RELATING TO A PROPOSED REVISION OF THE PATENT LAW.*

BY F. E. STEWART.

In the House of Representatives, February 21, 1916, Mr. Paige of Massachusetts introduced a bill for the revision of the patent law, which was referred to the Committee on Patents and ordered to be printed. This bill is known as H. R. 11967. It is a bill to amend Sections 4886 and 4887 of the Revised Statutes relating to patents. It provides:

(1) That no patent shall be granted on any application filed subsequent to the passage of this act upon any drug, medicine, medicinal chemical, coal-tar dyes or colors, or the dyes obtained from alizarin, anthracene, carbazol, and indigo, except insofar as the same relates to a definite process for the preparation of said drug, medicine, medicinal chemical, coal-tar dyes or colors, or dyes obtained from alizarin, anthracene, carbazol, and indigo.

(2) That in case any drug, medicine, medicinal chemical, coal-tar dyes or colors or dyes obtained from alizarin, anthracene, carbazol, and indigo, on which a patent for a definite process for the preparation thereof has been granted on any application filed subsequent to the passage of this Act is not manufactured in the United States by or under authority of the patentee within two years of the granting of said patent, and after the commencement of said manufacture the same is not continuously carried on in the United States in such a manner that any persons desiring to use the article may obtain it from a manufacturing establishment in the United States as against any citizen of the United States who may import such drug, medicine, medicinal chemical, coal-tar dyes or colors, or dyes obtained from alizarin, anthracene, carbazol, and indigo into the United States, or who may produce or manufacture the same in the United States or who may handle for sale or use such article so imported or manufactured.

Now what do these provisions mean in common language?

Briefly, they mean that if the bill is passed, no patents can be granted in the future for the kinds of chemical products mentioned in the bill, but patents for processes for producing the same may be granted, and that the patentee of a new process for manufacturing any one of the said kinds of chemicals, shall manufacture

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* Read before the Philadelphia Branch, A. Ph. A., January 17, 1917.

and produce the same in the United States within two years after the patent has been granted or forfeit the right to prevent others from importing or manufacturing for sale in this country, said products when made by the patented process.

Do we want to endorse this bill?

To answer this question it is necessary to consider the question of copyright or the right to copy writings and inventions, first as to the right itself and secondly as to the present laws relating to the patenting of inventions.

The question of copyright, which includes that of patent, is one of the most important subjects relating to man in the control of a civil government. The arguments for and against copyright were fought out in the so-called "Copyright War," which occurred in England about a century ago. The position taken by Lord Camden in opposition to copyright so well expresses the position of scientists generally in relation to patents that it is worthy of consideration at this time. In his speech Lord Camden said:

> Glory is the reward of science, and those who deserve it scorn all meaner views. I speak not of the scribblers for bread, who tease the press with their wretched productions. Fourteen years are too long a period for their perishable trash. It was not for gain that Bacon, Newton, Milton, and Locke instructed and delighted the world. When the bookseller offered Milton five pounds for his Paradise Lost, he did not reject it and commit his poem to the flames, nor did he accept the miserable pittance as the reward of his labor; he knew that the real price of his work was immortality and that posterity would pay it.

The position of his opponents is well illustrated by the following quotation from Terril in his treatise on patent laws:

> The theory upon which these laws rest is that it is to the interest of the community that persons should be induced to devote their time, energies, and resources to original investigation for the furtherance of science, the arts, and manufactures. This was recognized from the earliest periods which can pretend to be described as civilized. It is to the advantage of the whole community that authors and inventors should be rewarded, and no measure of reward can be conceived more just and equitable and bearing a closer relation to the benefit conferred by the particular individual than to grant him the sole right to his writing or discovery for a limited period of time.

In spite of Lord Camden and his brilliant speech, copyright legislation was successfully introduced in England, and I doubt whether the glory of Bacon, Newton, Milton and Locke would have been dimmed in the least if they had copyrighted their books and made arrangements with publishers for a share of the profits from their sales. And, in spite of the opposition of the medical profession, the patenting of materia medica inventions will probably continue, and it is possible that the time will come when physicians will consider the patenting of inventions just as ethical as the copyrighting of books.

What I have to say, therefore, is not intended as a protest against the application of copyright and patent laws to medicinal drugs and chemicals. I believe that if the copyright and patent laws were properly interpreted and applied to medical science and practice and to the arts of chemistry, pharmacy and drug therapeutics, they are capable of promoting progress in the sciences of medicine and chemistry and in the arts referred to. In fact, I go so far as to say that the laws, as they now exist, if properly applied would be adequate to secure this object.

Section forty-eight hundred and eighty-six of the present patent law provides that "Any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new or useful improvement thereof, not known or used by others in this country before his invention or discovery there-

of, and not patented or described in any printed publication in this or any foreign country before his invention or discovery thereof, or more than two years prior to his application, and not in public use or sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law and other due proceedings had, obtain a patent therefor."

The patent law also provides that the application for patent shall be so worded as to be perfectly intelligible to those who are engaged in the practice of the art or arts to which the patent belongs or most nearly appertains, so as to permit all such persons to freely manufacture and deal in the article after the patent expires and to readily do so in accordance with the directions for so doing contained in the application for patent.

I have said that the object of the patent law is to promote progress in science and useful arts. You will find by referring to the United States Constitution, Article I, Section VIII, Paragraph 8, that Congress is given the power to promote progress in science and useful arts by granting to authors and inventors for limited times, the exclusive right to their respective writings and discoveries.

A patent is a *grant* on the part of the Government representing the public at large, bestowed upon the inventor of a new and useful invention in exchange for the publication of his invention in such clear and precise language as to permit any person skilled in the art to use this knowledge in a legitimate manner, namely, for his own enlightenment as to the nature of the grant at the time the grant is given, and to permit him to manufacture and sell the same article on equal terms with the inventor when the patent expires.

A patent is a *contract* by and between the inventor and the Government, by the terms of which the Government provides the inventor with the machinery of the courts, by means of which he is permitted to protect his right to the exclusive use of the invention and in exchange for the same the inventor divulges the knowledge of his invention for the benefit of science at the time the grant is given, and relinquishes all claims to proprietary rights in the invention when the patent expires.

As already stated, the Paige Bill is intended to limit the patenting of certain chemicals mentioned in the bill to processes for their manufacture, leaving the products themselves open to competition so that others may be stimulated to invent new processes whereby said chemicals may be produced of a better quality or at a lower price during the lifetime of the patent. In other words, no monopoly of the products themselves is permitted, the only monopoly being processes governed by patents.

Is it wise to limit the patenting of this class of chemicals to processes only?

Let us consider what course other countries have pursued in relation to product patents in this connection.

Medicines are excluded from patent protection in Germany, France, Austria-Hungary, Italy, Japan, Denmark, Norway, Sweden, Portugal, Russia, and a number of other countries.

Other classes of inventions excluded from patent protection in many countries as well as in Germany are foods, chemical products, and inventions relating to war material.

In all of these countries exclusion from protection of inventions relating to medicines or foods does not generally extend to those relating to processes or apparatus for their manufacture. In all foreign countries which exclude chemical products from protection, except Switzerland, inventions relating to chemical processes may be patented, and in nearly all such countries it is expressly provided by law that a patent for a chemical process by which a new chemical product is made shall in effect cover such product, unless it be shown that such product was made in fact by some other process. In other words, when a new product is discovered, and a process of manufacture is patented, no person is permitted to compete with the original patentee unless he is able to show that the process he is to employ for that purpose is not an infringement upon the patented process.

The German patent law excepts from patent protection: (1) inventions the application of which is contrary to the laws or public morals; (2) inventions relating to articles of foods, whether for nourishment or for enjoyment, and medicines, as also substances prepared by chemical processes insofar as the inventions do not relate to a definite process for the preparation thereof.

Patents are granted, however, for processes and apparatus for manufacture, and Section 35 provides a method for protecting inventors of processes for the production of new substances in the following manner: "If the invention relates to a process for the production of a new substance, all substances of like nature are considered as having been made by the patented process until proof to the contrary is given."

It will be noted that if the Paige Bill passes in its present form, the protection afforded to inventors of processes for the production of new substances will be denied to the inventor of the process. Let us briefly consider the subject from this point of view.

Take Ehrlich's invention for a process for manufacturing dioxydiamidoarsenobenzol, also known as "606" and salvarsan.

We are told that Ehrlich made an arrangement with the German chemical house of Meister, Lucius & Brüning whereby said house furnished him with the money necessary to carry on the "606" experiments which resulted in his discovery of dioxydiamidoarsenobenzol, with the understanding that if a product were obtained of sufficient value to warrant its commercial introduction it was to be patented and the patent controlled by the commercial house mentioned.

It is evident that this arrangement was made in the light of the German patent law, which excepted from patent protection the new substance dioxydiamidoarsenobenzol and all substances of like nature and that the patent was limited to a process for preparing said product, leaving the product open to competition so that any other person was at liberty and is now at liberty in Germany, to manufacture the product by any other except the patented process, provided the same is not an infringement upon the patented process.

When it is considered that "606" experiments were required before Ehrlich was able to discover a process by which dioxydiamidoarsenobenzol could be produced in a satisfactory manner, the reward given to him by his government in exchange for publishing his process, was certainly not excessive. An industry was established in Germany for the production of this product by the patented process which has yielded the inventor and the house acting as his agents, several

millions of dollars and has afforded employment for a large number of persons. Furthermore, the substance itself, known as salvarsan, has proved to be a new and useful invention. Thus it is evident that the granting of the patent to Ehrlich by the German government for a process by which this valuable substance has been produced in the manner aforesaid, has resulted in promoting progress in the science of medical chemistry and in the useful arts of medicine and pharmacy.

Now let us consider what has been done with this same chemical product in the United States.

Under the United States patent law no class of useful invention is excluded from protection. Any person who has discovered a new product to be used either as food or as a medicine may patent the same, and thereby acquire a monopoly of its production for a period of seventeen years. Foreign manufacturers take advantage of the United States patent law and patent their products in the United States. The monopoly thus acquired enables them to obtain a high price for their patented products during the life of the monopoly. The profit thus secured is not used for the benefit of American industries, but is applied to building up the industries of foreign countries at the expense of the American people.

This is well illustrated in the case under consideration. Salvarsan was patented in the United States before its commercial introduction into this country and I understand from good authority that fifty patents have been granted to the original patentee or his assigns, for the purpose of continuing the monopoly after the original patent expires, so that at the end of the seventeen years the original manufacturers will still be able to continue their monopoly. Furthermore, the name "salvarsan" has been registered as a trademark so that when the original patent expires the manufacturers will be able to continue their monopoly by means of product patent, process patent and trademark registration, indefinitely. By this means a German house is permitted to build up a great industry at the expense of the United States.

When this instance is multiplied by many instances of a similar kind in which product patents have been granted by the United States to foreign manufacturers without insisting that the manufacture of such products shall be carried on in this country, it becomes evident that our patent law as thus interpreted and applied does not promote progress in the arts of chemistry, pharmacy and drug therapeutics as carried on in the United States In fact, it is a very serious hindrance both to science and to the arts referred to. It hinders science because it does not stimulate original research on the part of would-be inventors in this country. Neither does it build up United States industries.

The Paige Bill seeks to remedy this serious objection to our patent law by making it necessary for foreign patentees to manufacture their products in this country within two years after the patents have been granted.

A commission was appointed under act of Congress, approved June 4, 1898, to "revise the statutes relating to patents, trade and other marks, and trade and commercial names." It was urged before this commission, both at its hearings and in written communications read before it, that the United States patent law should be amended to exclude from patent protection both medicines and chemical products generally, at least insofar as such inventions are the inventions of subjects or citizens of the foreign countries which exclude this class of inventions from

patent protection, and it was contended then, and has been the contention ever since, that subjects or citizens of foreign countries should not be allowed to receive in this country patents for inventions which are not patentable in their own country.

Thus far the German manufacturing houses have been able to defeat this very desirable legislation. It has been argued that certain treaties between the United States and Germany which give us certain advantages will have to be abrogated to permit such a change in the law. It would seem to me that this question of treaty should be carefully looked into by Congress for the purpose of ascertaining the truth in regard to the matter and for the purpose of publishing the truth, so that the American people may have an opportunity to decide whether or not we are gaining more than we are losing by such a treaty as the one urged as an excuse for not so revising the patent law as to protect American inventors from what appears to be such unfair competition.

If the United States Government should conclude to limit patents to processes only, surely something should be done to throw the burden of proof upon those claiming to have invented new processes for producing the same products as those produced by the patented processes.

As suggested in the report of the Committee on National Legislation of the American Pharmaceutical Association, at its annual meeting in 1889 (see Proceedings of the A. Ph. A., Vol. 47, 1899, p. 63), "This might be done by compelling the inventors of alleged new processes to divulge them by applying for patents, so that the novelty in each case may be determined by the Patent Office. It is argued with force that it is the original inventor who conducts the expensive research which points out the way. It is he who sows the seed, and unless the new process should show decided novelty, and its inventor should pay a royalty to the original inventor, great hardship would often result, for the harvest would in many instances be reaped by those who have not sown, and the original inventor would have only his trouble for his pains."

"The existing rewards to those engaged in original research should be increased rather than diminished, and such investigations should be thus rendered sufficiently profitable to attract the very best talent of the land, and also to attract capital in aiding and developing research and progress in the field of medical chemical industry."

Finally, before closing what I have to say, permit me to call your attention to a closely related subject concerning which something ought to be done by our legislators. I am bringing it up in this connection because upon the clear understanding of the law relating to the question of trademarks depends the opinion of a good many manufacturers, as to the proper course for them to pursue in their attitude toward patent law revision.

It is believed by many that names may be patented or copyrighted. This is a very serious error which demands correction. As stated in circular No. 19, issued by the Librarian of Congress, "the copyright laws contain no provision under which protection can be obtained upon a *mere name* or *title*. Entry can not, therefore, be made in the copyright office for coined names, names of articles of manufacture; names of games or puzzles; names of substances; names of products, or names of medicines."

The manufacturers of many German synthetics patented their products under

the chemical names, and registered the coined names as trademarks. Now as the right to use a trademark is a natural right, and is protected by the common law—a manufacturer having just as much right to use his commercial signature for the purpose of indicating the source of his product as he has to sign his name to a check—that right does not expire like a patent. Consequently, the manufacturers hoped by this scheme to defeat the object of the patent law, which is to promote progress in science and useful arts by granting inventors the exclusive right to their inventions for limited times, in exchange for the publication of full knowledge thereof by the proper application for patent. However, "Uncle Sam" has something to say about this. He said it in the decision of the Supreme Court of the United States in 1895, in the Singer Sewing Machine Case. The decision reads as follows:

> The result, then, of the American, the English, and the French doctrine universally upheld is this, that where during the life of a monopoly created by a patent a name, whether it be arbitrary or be that of the inventor, has become, by his consent, either express or tacit, the identifying and generic name of the thing patented this name passes to the public with the cessation of the monopoly which the patent created. Where another avails himself of this public dedication to make the machine and use the generic designation, he can do so in all forms, with the fullest liberty, by affixing such name to the machine, by referring to it in advertisements, and by other means, subject, however, to the condition that the name must be so used as not to deprive others of their rights or to deceive the public, and therefore that the name must be accompanied with such indications that the thing manufactured is the work of the one making it as will unmistakably inform the public of the fact.

This question of ownership of names was considered by the Commission appointed by William McKinley, President of the United States, for the purpose of revising the patent and trademark laws above referred to. The Commission held sittings in New York City and at the Patent Office in Washington, at which the Committee on National Legislation of the American Pharmaceutical Association was represented. In the opinion of the Commission, the control of the currently used names of patented products was settled once for all by the above decision of the United States Supreme Court. As one of the Commission, Mr. Arthur Greeley said: "The arrangement between the inventor and the Government is that the former shall surrender to the public his right to restrain the free use of the invention at the expiration of the patent, and it is not likely that the Government will permit the inventor to tie a string to his invention wherewith to pull it back after the patent expires."

As already stated, the contract between the patentee and the Government requires that the inventor shall relinquish all proprietary claims to the invention after his patent expires, so that all others shall have the opportunity to compete with him on equal terms. The ownership of the currently used name of an invention gives to the one who controls it a very unfair advantage over competitors because until another name is advertised and gains equal prominence with the currently used name, the public is not able to compete on equal terms.

Much of the difficulty now in the way of securing proper patent law revision might be obviated by drawing a clear line of demarcation between products and names of products on the one hand, and brands and names of brands on the other. For example, diphtheria antitoxin is a product. The currently used name of the product is diphtheria antitoxin. Both the product and the name of the product are free to all manufacturers. There are on the market a number of brands of

diphtheria antitoxin, each distinguished by the name of the manufacturer appended to the name of the product, as, diphtheria antitoxin Mulford, diphtheria antitoxin Squibb, diphtheria antitoxin Lederle, etc., etc. The product and the name of the product being free to science and also free to all manufacturers, is in a position for impartial discussion in the medical societies and by the medical press, without fear of reprisal if articles are published unfavorable to the use of diphtheria antitoxin, or charges of collusion between the manufacturers and the authors of the articles relating to diphtheria antitoxin, or the publishers of the same, if the articles are laudatory in character.

On the other hand, when the products themselves and the names of the products are commercially controlled they can not be properly introduced to science, and research concerning them promoted in a proper manner because the proper introduction of a new materia medica product requires the use of the educational machinery of the medical and pharmaceutical professions, *i. e.*, the professional press, societies, colleges, text-books, pharmacopoeia and dispensatories.

It is essential that the control of this educational machinery shall be protected from commercial exploitation and the teaching of error. This protection can not be afforded under a system of materia medica monopoly in which the products themselves and the names of the products are controlled by commercial houses engaged in their manufacture and sale. It is impractical for the medical press, for example, to carry on a professional propaganda in the reading pages of the journals in regard to commercially controlled products and at the same time to carry on a commercial propaganda in the advertising pages concerning the same products.

Or to take another illustration: Condensed milk is the name of a product —a product open to competition and free to anyone to manufacture under the name of condensed milk. "Eagle" brand, "Anglo-Swiss" brand and "White Cross" brand are names of brands. Condensed milk may be impartially discussed in the professional societies and by the professional press without fear or favor and at the same time these several brands may be advertised in the advertising columns. There is very little danger of a combination on the part of the manufacturers of condensed milk for the prevention of the publication of full information concerning the food value of condensed milk.

Trichlormethane is a product. The name is long and unwieldy, so a short, euphonious name was coined for it, *viz.*, "chloroform." But the name "chloroform" is just as much the name of a product as trichlormethane; and when the product is ordered by one name, the dispenser is justified in dispensing the product under either name.

I have thus attempted in this brief paper—brief because a full treatise on this very important subject would require a book of many pages—to place before you the principles underlying the copyright, patent and trademark laws, for the purpose of making the Paige Bill as clear to you as is possible under the circumstances. Some of those who have read the bill insist that it is very difficult for them to understand. They insist that its language is not clear on account of the legal verbiage. I believe this point to be well taken. It would seem to me that the one way we can have a clear conception of it is to discuss the question of copyright, patent and trademark along the lines I have indicated in this paper and after we have decided

just what we want, place our conclusions in the form of resolutions in the hands of a committee representing the medical, chemical, pharmaceutical and legal professions, with the request that they present their report to a joint meeting of the several professions named and the business men engaged in the pharmacal and pharmaco-chemical industries for further consideration. Said report should be in the form of condensed statements supported by arguments explaining the reason why it is recommended for our adoption.

By unanimous vote, the Philadelphia Branch, A. Ph. A., indorsed the provision of the Paige bill limiting patents to processes only, to extend the provisions of the Paige bill to include all technical chemicals and food compounds, to ask that the manufacture of articles patented in this country be limited to this country save so far as reciprocity agreements with other nations may supersede such arrangement, and to ask that the plain statement be written into the patent, trademark and copyright laws that genetic titles of medicines are not subject to patent or copyright.—EDITOR.

VALUE OF ACADEMIC BASIS FOR TECHNOLOGY.

"Technical schools, unlike universities, have the definite object of training students to make their living in industry, and they make their course as practical and as little academic as possible. A technical school is sometimes connected with a university, and we can not in any case consider university training for industry without taking technical colleges into account. It must be admitted that if the best type of science training, even for industrial use, is the academic, the technical colleges are on wrong lines, and as technical colleges are doing splendid work, the idea put forward appears to be wrong.

"But it is not urged that the academic training is the best in every way, but that, on the whole, it is best because, first, the professors are able to effect it best; second, because a student has so little time to spare that it can best be laid out in acquiring a good sound foundation; third, a well-trained mind with the academic can easily acquire the technical outlook, too; fourth, because academic science trains the mind to reason rather than to memorize, and deals with the facts of nature instead of the ideas or doings of other men just as foolish and illogical as ourselves.

"More than this, if the universities converted themselves into technical colleges, academic science and with it technology would get moribund. Whether technical colleges are on the best lines is another question. They may be badly designed for training the best class of technologist, while well suited for doing the best for men who have little time, and must be content with an inferior general foundation and a superstructure which is to a great extent imitation technology.

Recently we have heard a great deal about universities helping in scientific research. Research in academic science has little to do with national industry. All such research is published, and technologists all over the world utilize the results wherever the research is carried on. Research in academic science has no direct effect on national industry, but it has a great influence in rousing scientific enthusiasm, which is most important. But the outcry for scientific research for the benefit of industry is made chiefly by people who have no clear idea of the difference between academic and technical research, or of their circumstances. It is largely due to science teachers backed up by newspaper writers."—Dr. J. Swinburne.

SCIENTIFIC SECTION, AMERICAN PHARMACEUTICAL ASSOCIATION

PRELIMINARY NOTE ON THE VALUE OF BETA-IMINAZOLYLETHYLAMINE HYDROCHLORIDE AS A STANDARD FOR TESTING PITUITARY EXTRACTS.*

BY PAUL S. PITTENGER AND CHAS. E. VANDERKLEED.

In a paper on "Pituitary Extract" in the *Journal of the American Medical Association*, August 8, 1914, page 476, Dr. George B. Roth suggested the use of the above histidin derivative as a standard for testing pituitary extracts. The U. S. P. Revision Committee later incorporated the following standard in the U. S. P. IX for Liquor Hypophysis:

"One mil of Solution of Hypophysis, diluted 20,000 times, has the same activity on the isolated uterus of the virgin guinea pig as a 1 to 20,000,000 solution of beta-iminazolylethylamine hydrochloride when tested as directed by the United States Hygienic Laboratory."

Before adopting a complex substance like the above as a standard for adjusting the strengths of commercial preparations, it would have been better, perhaps, to make a thorough study of a number of problems such as the following:

1—Degree of uniformity in the physiologic action of different available samples of the proposed standard substance.

2—Rate of deterioration of solutions of this substance.

3—Effect of sterilization on solutions of this substance.

4—Rate of deterioration of the substance itself.

5—Effect of repeated doses on the isolated uterus.

6—The toxicity of the substance as compared with Pituitary Extract.

7—The relative activity of a Pituitary Extract of the strength proposed by the U. S. P. IX and that of the commercial extracts as supplied by the leading pharmaceutical manufacturing houses.

As it would be impracticable as well as rather expensive to prepare a fresh 1:20,000,000 solution of the standard substance for each test, we thought it advisable to determine whether or not it would be possible to prepare a 1:1,000 dilution of the salt, put this up in ampuls and then dilute the contents of one of these ampuls to 1:20,000,000 for each test. In order to know whether or not it would be safe to do this it was necessary to determine the rate of deterioration of the solution when kept under different conditions.

Accordingly, a little over a year ago we made a solution of the salt, divided it into twelve parts and stored them for one year in the following manner:

(*a*) Sterilized { 1—amber ampuls; 2—flint ampuls } Kept in *light*.

* Read before the Scientific Section of the American Pharmaceutical Association, Atlantic City, September, 1916.

(*b*) Unsterilized { 1—amber bottles; 2—flint bottles; 3—amber ampuls; 4—flint ampuls } Kept in *light*.

(*c*) Same as (*a*) but kept in the *dark*.

(*d*) Same as (*b*) but kept in the *dark*.

After one year had elapsed tests were started in order to determine the relative activity of the solutions kept under different conditions. These tests have not been completed, but to date the following results have been obtained:

1—The solution in the *unsterilized amber ampuls* kept in the *light* was of exactly the same activity as the solution in the *unsterilized flint ampuls* kept in the *light*.

These ampul solutions, however, were 2.6 times as active as fresh solutions made from the same sample of the standard substance as was originally employed.

2—The solution in the *sterilized amber ampuls* kept in the *light* was of exactly the same activity as the solution in the *sterilized flint ampuls* kept in the *light*.

3—The solution in the *sterilized amber ampuls* kept in the *light* was of exactly the same activity as the solution in the *sterilized amber ampuls* kept in the *dark*.

4—The solution kept in the *flint bottles* in the *light* was of exactly the same strength as a new solution of the substance but only about one-third as active as the solutions which had been kept in the ampuls.

5—The solution kept in the *amber bottles* in the *light* showed practically no activity.

While it is hard to draw positive conclusions from this set of tests, and without endeavoring to explain the entire loss of activity of the material in the amber bottle kept in the light, it would seem that the solutions in ampuls whether kept in amber or in flint and whether kept in the light or in the dark all retain their activity. The surprising part of the result, however, was the fact that new solutions of the original substance possessed only about one-third of the activity of the solutions prepared one year before from the same sample. Did the dry salt lose physiologic activity at a greater rate than solutions of the salt preserved in ampuls or did the latter break down into substances possessing greater physiologic activity? That the former is probably the true explanation is indicated by comparisons with some commercial ampul solutions of beta-iminazolyl-ethylamine hydrochloride which are described further on in this communication.

In order to determine whether or not sterilization influences the activity of these solutions a 1:40,000 dilution was prepared and then divided into two portions. One portion was filled into ampuls, sealed and sterilized for 15 minutes at 115° C., after which it was tested against the unheated portion. Repeated tests showed that both portions possessed the same activity. In other words, sterilization does not affect the activity of solutions of this substance.

The next step was to compare the activity of different available samples of the proposed standard substance.

It was impossible to satisfactorily carry out this set of experiments because due to the European War it was impossible to obtain new samples of the standard substance to compare with the one which we used in carrying out our experiments. We were, however, able to obtain ampuls containing a 1:1,000 dilution of the salt bearing two different laboratory numbers which we presume were made from two

different lots of the salt. Repeated tests showed that these two solutions were of exactly the same activity as a corresponding solution of our standard substance which was purchased a little over a year before. The original activity of this substance we do not know but the results given above show that the ampul solutions prepared from it one year ago are about three times as active as new solutions prepared from the same sample. This would tend to show that the substance used in preparing the ampul solutions which were supplied to us by the manufacturers of the substance must have been only about one-third as active as the substance which we used one year ago. Perhaps the manufacturers prepared these ampul solutions from some of the original lot from which we obtained our supply and their stock deteriorated at exactly the same rate as the sample in our possession.

In our preliminary work with this standard substance the uterus seemed to "play out" or become insensitive to the substance more quickly than when testing pituitary extract alone. This led us to believe that this substance might be more toxic than corresponding amounts of pituitary extract. Later experiments, however, had a tendency to dispel this idea. In order to prove this point we determined the minimum lethal dose of both preparations on guinea pigs. The results of these tests showed that the M. L. D. for a standard Pituitary Extract (H. K. M. Co.) is 5.75 mils per 250 Gm. body weight of animal. The M. L. D. of beta-iminazolyl-ethylamine hydrochloride was found to be 2.0 mils of a 1:1,000 dilution per 250 Gm. body weight of animal.

According to the proposed standard for the U. S. P. IX a 1:20,000,000 dilution of the standard substance equals a 1:20,000 dilution of pituitary extract, or in other words, the standard substance itself is 1,000 times as active as pituitary extract.

According to our results on the toxicity of the two substances the standard is 2,875 times as toxic as pituitary extract. When used in the proportions employed in the isolated uterus test, therefore, their relative toxicities would be as 1 is to 2.87. When we consider the variations in the size of the dose of the unknown, however, the difference in toxicity is practically negligible.

We find, however, that the standard adopted by the U. S. P. IX is very low because by comparison we find that the commercial extracts, prepared by the leading pharmaceutical houses, which have been on the market for several years and to which physicians have become accustomed as to dosage, etc., are from 3 to 5 times as active as an extract of the new U. S. P. standard strength. This is unfortunate, as there is no reason why a weaker preparation than the ones to which physicians have become accustomed should be placed on the market. It is probable that manufacturers will continue to endeavor to supply pituitary extracts of the same strengths that they have been supplying in the past, marking such preparations "different in strength from the U. S. P." or perhaps "stronger than the U. S. P." Before it becomes necessary to revise the Pharmacopoeia again it is to be hoped that definite requirements can be drawn up for the test substance itself and that an accurate coördination of the required U. S. P. strength and of the common pharmaceutical practice may be secured.

PHARMACODYNAMIC LABORATORIES,
H. K. MULFORD COMPANY, PHILADELPHIA.

FOWLER'S SOLUTION.*

BY H. ENGELHARDT AND O. E. WINTERS.

In looking over the reports of the various Health Boards, we find that there is hardly any pharmaceutical preparation which has oftener been found to be below standard than Fowler's Solution.

It is generally accepted that in Fowler's Solution frequently the arsenic in the arsenous state is oxidized to arsenic in the arsenic state, and that the discrepancies found by the various Health Boards are chiefly due to such an oxidation, inasmuch as, according to the U. S. P assay process, only the arsenic in the arsenous state is estimated.

In 1908, A. B. Lyons[1] reported on a series of experiments which were carried out in order to find at what rate this oxidation takes place. Lyons arrives at the conclusion that products which are slightly acid are not so prone to oxidation as those which are alkaline and especially those which contain alkali carbonates or alkali hydroxides.

Anticipating complaints in regard to Fowler's Solution, we thought it advisable to take up this subject again in order to find at what rate the oxidation of the arsenite takes place. This was done by estimating both the arsenous acid and the total arsenic.

A sample of Fowler's Solution was prepared strictly according to the U. S. P. This sample assayed 1.016 percent As_2O_3 at the time of manufacture. One quart of the solution was kept in an amber cork-stoppered bottle on a shelf under ordinary conditions, while another part of the sample was filled into one-ounce flint glass cork-stoppered bottles. The samples were assayed at intervals of one month by the following process:

The arsenous acid was estimated in the regular way with iodine. In order to save material we tried to utilize the final solution, which, after oxidation with iodine, contained all the arsenic in the arsenic state by applying to it Lukenow's method.[2] This was done by adding to the solution 3 Gm. of potassium iodide and 20 Cc. of concentrated hydrochloric acid, allowing the mixture to stand for 10 to 15 minutes and then titrating the separated iodine with thiosulphate in the

	Large bottle.			Small bottle.	
Month.	Direct.	Total.	Month.	Direct.	Total.
March	1.016%	1.023%	March	...	...
April	1.010%	1.010%	April	1.016%	1.019%
May	1.011%	1.018%	May	1.014%	1.021%
June	1.01 %	1.015%	June	1.020%	1.015%
July	0.994%	1.030%	July	0.985%	1.021%
August	0.992%	1.024%	August	0.984%	1.025%
September	0.990%	1.032%	September	0.99 %	1.02 %
October	0.992%	1.038%	October	1.03 %	1.044%
November	0.990%	1.04 %	November	0.985%	1.04 %
December	0.987%	1.04 %	December	1.025%	1.04 %
May	0.984%	...			
June	0.992%	1.04 %	June	1.03 %	1.04 %

* Read before Scientific Section, A. Ph. A., Atlantic City meeting, 1916.

[1] Proceedings A. Ph. A., 1908, p. 901.

[2] *Apoth. Zeit.*, 1910, p. 122.

Assay at date of manufacture As_2O_3.	Reassayed after months.	As_2O_3.	Total arsenic. A. O. A. C. method.	Total arsenic. Chapin's modifications.
1.05	30	1.02	1.07	1.04
1.02	29	0.992	1.03	1.07
1.07	28	1.099	1.15	1.14
1.09	26	1.03	1.11	1.13
1.04	26	0.997	1.08	1.06
1.02	25	0.92	1.02	1.03
1.04	24	0.953	1.02	0.987
1.05	22	1.00	1.05	1.05
1.05	22	1.00	1.11	1.09
1.04	21	0.99	1.05	1.11
1.02	19	1.03	1.04	1.08
1.03	18	1.04	1.11	1.09
1.05	17	1.05	1.1	1.06
1.04	16	1.03	1.09	1.09
1.03	16	0.94	1.0	1.0
1.01	14	0.96	1.05	1.055
1.04	12	0.95	1.08	1.03
1.04	12	1.02	1.07	1.04
1.03	11	0.97	1.03	1.03
1.02	9	1.02	1.09	1.09
1.01	8	1.05	1.09	..
1.03	6	1.0	1.06	1.02
1.04	5	1.02	1.05	1.07
1.0	4	0.93	0.97	0.95
1.02	3	1.02	1.06	1.09
1.03	1	1.01	1.02	1.03

regular way. For reasons, so far unknown, this method did not work properly. The end point, when using starch solution as indicator, was very uncertain and a distinct blue color could not be obtained.

We therefore applied a method which is recommended for estimating the total arsenic in London purple. This method, a modification of Heywood's method,[1] is published in a slightly modified form in *Bulletin 107, Official and Provisional Methods of Analysis of the Association of Official Agricultural Chemists.* We have modified this method in the following way: 5 Gm. (exactly weighed) of Fowler Solution were mixed with 20 Cc. of concentrated hydrochloric acid; 45 Cc. of water and 2 to 3 Gm. of potassium iodide and the mixture were heated on a water bath for about one-half hour. After cooling, the iodine which had separated was discharged by sodium thiosulphate solution, the contents of the flask were then poured onto an excess of sodium bicarbonate and after well diluting with water (about 600 Cc. liquid in all) the arsenous acid was titrated in the usual way. Quite recently, Chapin[2] pointed out that when eliminating the iodine, formed in the reduction process, by thiosulphate solution no distinct color change in the titration of the arsenous acid could be obtained. He therefore recommends replacing thiosulphate solution by a weak (0.5 percent) sodium sulphite solution. We have applied this method also but have found that nothing is gained by this modification.

The experiments were made in duplicate and from the results referred to be-

[1] *Journ. Am. Chem. Soc.*, 1900, p. 800.
[2] *Ibid.*, 1916, p. 625.

low it can be seen that the degree of accuracy is not all that could be desired. In addition to the above named sample which was especially prepared for this examination we also examined samples of Fowler's Solution from our Control Department which were at the time of re-examination from a few weeks to three years old. The results obtained were as follows:

Judging from the above results, it is evident that the arsenous acid in Fowler's Solution is oxidized only to a very slight degree when the solution has been properly prepared and has been kept under ordinary conditions. It was very gratifying to note that the solution which was kept in a large bottle and from which, each month a certain amount was taken out for examination (thus giving about the same conditions under which the stock bottle of Fowler's Solution is kept in a drug store, that is, increasing the amount of air gradually), did not deteriorate as rapidly as might be expected. In regard to the color of the various solutions after being kept for various lengths of time, it might be stated that the color varied from a red to a very pale pink. In other words, in some of the solutions the color of the tincture of lavender had been destroyed completely. That, however, the decoloration of the tincture of lavender is in no way indicative of an oxidation of the arsenous acid is evident by the above results.

REFINING OILS WITH PERMANGANATE OF POTASH.

Since pale-colored oils are considered of better quality than dark or muddy ones, a special process of refining is employed for olive, linseed, poppy, fish, and other oils. According to *Por Esos Mundos* (Madrid) this is as follows: A kilogram of permanganate of potash (2.2 lbs.) in the form of small crystals is dissolved in 10 liters of water. This solution, of a deep purple color, is mixed gradually with 30 kilos of the oil to be refined and stirred repeatedly as smoothly as possible during a period of two days. At the end of this time there are added 20 liters of water and 5 liters of commercial hydrochloric acid at 20 to 22 degrees Baumé and it is stirred again energetically. Several days later the acidulated water is carefully decanted. To remove all trace of the acid it is treated with clear, warm water and as a final operation is passed through a charcoal filter.

FORMULA FOR AMBRINE.

T. Whitmore Peck of Birmingham, England, contributes the following to the *Pharmaceutical Journal* as the formula for Ambrine:

Resorcinol	1 percent
Oil Eucalyptus	2 percent
Olive Oil	5 percent
Hard Paraffin	67 percent
Soft Paraffin	25 percent

PHYTOCHEMICAL NOTES.*

From the Laboratory of Edward Kremers.

82. The Oleoresin and Oil of *Pinus jeffreyi*.

BY L. J. OSTLUND.

An oil from *Pinus jeffreyi* was examined by Venable[1] in 1880, who supposed it to be an oil from *Pinus sabiniana*, but Wenzell[2] later (1904) showed that it was from the related California species.

In 1901 Blasdale[3] re-examined the oil for heptane and identified the latter by its boiling point and behavior toward sulphuric acid.

A material supplied by the Forest Products Laboratory was examined in 1913 by R. J. Harnon[4] and was found to consist in part (about two-fifths) of terpenes. The oleoresin from Jeffrey pine had evidently been mixed with that from the western yellow pine, *Pinus ponderosa*, in the gathering.

Schorger,[5] while he discussed the heptane situation, did not examine the oleoresin from Jeffrey pine, but expressed the hope "that this may be done later" (p. 18).[3]

Through the kind coöperation of the Forest Service and that of Mr. F. D. Fryer of Santa Rosa, Cal., a barrel of Jeffrey pine oleoresin was collected during the summer of 1915, in the collection of which special care was taken not to allow any admixture of oleoresin from other species. Leaves and cones submitted by Mr. Fryer were identified by Professor R. H. Denniston as those of *Pinus jeffreyi*. A sample of oil distilled by himself was also sent for examination.

Acid and Saponification Values of Oleoresin.—The acid and saponification values of the oleoresin collected in 1915 by Fryer were determined according to the directions of the U. S. P. (eighth revision) for Acid Number of Resins (p. 535) and Saponification Value of Fats and Oils (p. 535). Duplicate determinations were made. The following results were obtained:

Expt.	Acid value.	Sap. value.
I	140.0	166.0
II	140.5	166.5

Preliminary Distillation.—500 Gm. of the oleoresin, as received, were subjected to ordinary steam distillation in a glass flask, the steam being generated in a tin can. This yielded 43 Gm. or 8.6 percent of oil which had a specific gravity of 0.697 at 20°.

Another 500 Gm. of oleoresin were saponified in five separate portions with a

* Read in abstract before Scientific Section, A. Ph. A., Atlantic City meeting, 1916.

[1] Berichte, 13, 1649.

[2] Pharm. Rev., 22, 413.

[3] J. Am. Chem. Soc., 23, 162.

[4] Unpublished results in the possession of E. K.

[5] "An Examination of the Oleoresins of Some Western Pines," Bull. 119, of the Forest Service, U. S. Dept. of Agr., 1913.

slight excess of sodium hydroxide, the saponification value of the oleoresin having previously been determined as 166.0 and 166.5, respectively. The amounts and percentage yields are herewith tabulated.

Expt.	Amt. of oleoresin.	Amt. of oil.	Percentage of oil.
1	112 Gm.	9.9 Gm.	8.9 percent
2	115 Gm.	10.1 Gm.	8.8 percent
3	125 Gm.	11.5 Gm.	9.2 percent
4	116 Gm.	10.3 Gm.	8.9 percent
5	105 Gm.	9.3 Gm.	8.9 percent
Total	573 Gm.	51.1 Gm.	8.92 percent (Average)

Hence it becomes apparent that the percentage yield of oil can be increased but little by saponification of the resin acid previous to the steam distillation.

The only reference to the yield of heptane in the oleoresin of Jeffrey pine is found in the article of Blasdale, previously referred to, who obtained "about three percent" from material "collected at Lake Tahoe from stumps of recently cut trees."[1] The larger yield recorded above is unquestionably due to the fact that the oleoresin collected by Mr. Fryer was obtained by the boxing method whereas that distilled by Blasdale had been exposed in such a manner that much of the heptane had evaporated. Hence the percentage of heptane agrees fairly well with that obtained from the oleoresin of Digger's pine.

Distillation of Oleoresin.—The bulk of the oleoresin was then subjected to steam distillation in the 60 liter Lentz still of the laboratory, about one-eighth being taken as a charge. This task was kindly performed by Professor E. R. Miller. Of the careful manner in which the distillation was conducted he states:

"In any given distillation the greater part of the oil, probably 80–90 percent, was driven over in half an hour, but in every case the distillation was continued at least five hours and in some cases as long as eight hours, in order to obtain as much as possible of the higher boiling oil. Even in the case of the longest period of distillation small amounts of oil were still obtained during the last hour."

A total of 21.95 liters of oil was thus obtained, the specific gravities of the several distillates determined at 20° being herewith recorded.

1	0.6963	5	0.6976
2	0.6963	6	0.6976
3	0.6976	7	0.6976
4	0.6974	8	0.6976

Cohobation of the Aqueous Distillate.—"In separating the oil from the resin about 70 gallons of aqueous distillate were obtained. With the exception of 8 to 10 gallons which were lost, this distillate was distilled by means of the steam-jacket until a little more than one-fourth of it had passed over. The portion in the still was rejected. The distillate thus obtained was in like manner distilled, recovering about one-third of it and rejecting the remainder. Finally, the distillate was cohobated, the process having been continued until about one-half ($2^1/_2$ gal.) of the distillate had passed over. In all these distillations small quantities of oil were obtained, the total yield of oil recovered being 92 Gm. The color of the oil was decidedly brownish yellow."

Fractionation of the Oil.—"After reserving about two ounces of each sample

[1] Comp. also Gildemeister, "Die aeth. Oele," Bd. II, p. 100.

(the eight portions) the remainder of the mixed oil (about $21\frac{1}{2}$ liters) was fractionated with steam. Twenty fractions of one liter each were obtained. All these volatilized very rapidly. The first nineteen were colorless; the twentieth had only a trace of color. The twenty-first fraction measured 500 Cc., fraction No. 22, 110 Cc. and fraction No. 23, 22 Cc. Fraction No. 21 had a slight yellowish color, fraction No. 22 was very noticeably colored and fraction No. 23 was yellow with a tinge of green."

The specific gravity of these fractions was taken at 20° with a Mohr-Westphal balance and the results are herewith tabulated:

Fraction.	$d_{20°}$.	Fraction.	$d_{20°}$.
1.....	0.6855	12.....	0.6860
2.....	0.6865	13.....	0.6875
3.....	0.6865	14.....	0.6985
4.....	0.6865	15.....	0.6879
5.....	0.6864	16.....	0.6879
6.....	0.6864	17.....	0.6888
7.....	0.6865	18.....	0.6896
8.....	0.6865	19.....	0.6980
9.....	0.6870	20.....	0.782
10.....	0.6870	21.....	0.863
11.....	0.6860	22.....	0.9014

The constancy of the density of fractions No. 1 to 19 certainly speaks not only for the uniformity in composition, but also speaks well for the absence of terpenes, the absence of which in turn reveals the absence of oleoresins from terpene-producing pines. Whether there is any probability of admixture of oleoresin from *Pinus sabiniana* does not become apparent from these data.

COHOBATION OF AQUEOUS DISTILLATE OBTAINED BY FRACTIONATION OF THE OIL.

Inasmuch as steam was used in the fractionation of the oil, the aqueous distillate might be assumed to have retained at least a part of the more water-soluble constituents of the oil. The amount of aqueous distillate being about 38 liters and that of the fractionated oil 21 liters, the ratio of water to heptane is roughly 2 : 1.

These 10 gallons were cohobated twice, yielding all told 12 g. of oil.

NOTE.—The heptane material thus obtained will be used in part for the revision of the physical constants of this hydrocarbon. The percentage of higher boiling non-heptane constituents appears to be larger than in the case of the oil from the Digger's pine. That aldehydes or ketones are present is indicated by the formation of a solid sodium acid addition product. The regenerated aldehyde or ketone yields a crystalline condensation product with *p*-nitrophenyl hydrazine. The presence of esters is also indicated by the saponification values of certain fractions. Optically active substances are also present in these higher fractions. A joint report of these oxygenated constituents together with those found in the Digger's pine oil will be made later.—*E. K.*

SECTION ON PRACTICAL PHARMACY AND DISPENSING, AMERICAN PHARMACEUTICAL ASSOCIATION

DIACETYLMORPHINE U. S. P. AND ITS HYDROCHLORIDE.*

BY HUGO H. SCHAEFER, PH.D.

Two alkaloidal preparations newly admitted to the Ninth Revision of the Pharmacopoeia are diacetylmorphine alkaloid and its hydrochloride. Undoubtedly both will receive considerable attention from the pharmacist and chemist because of their being newly admitted to the Pharmacopoeia and because of the rather variable composition and behavior of those samples found upon the market. In the following paper I have endeavored not only to point out some of these variations but also to cite the results of a number of experiments, etc., made upon these two products.

Much has been written and said about the melting point of diacetylmorphine alkaloid and especially of diacetylmorphine hydrochloride. The Pharmacopoeia states that the alkaloid melts between 171.5° and 173.5° C. Four samples of this product made by different manufacturers and obtained in the open market were tested and found to melt sharply and distinctly at 172° C. Therefore, it would seem that the official specification, that it shall melt between 171.5° and 173.5° C. is quite liberal.

The determination of the melting point of the hydrochloride, however, offers a number of difficulties. The Pharmacopoeia states that it "melts at about 230° C. with decomposition." This means much or little. I have found it difficult to obtain any definite melting point with this salt, due to the fact that it slowly decomposes when subjected to temperatures above 200° C. In order to show the variations which occur in determining this melting point the following experiments were made, all upon portions of the same sample of diacetylmorphine hydrochloride:

Experiment A. A melting point determination was made in the ordinary way in such a manner, however, that the rise in temperature was at the rate of $4^1/_2$° C. during each minute of heating. The salt began to acquire a darker color at 190° C., first yellow then brown, and melted at 225° C. The total time of heating amounted to almost forty-five minutes.

Experiment B. Upon another portion of the same sample of diacetylmorphine hydrochloride, a melting point determination was made, in such a way, however, that the rise in temperature progressed at the rate of 6.5° C. during each minute of heating. The substance began to darken at about 200° C. and melted at 228° C. The total time of heating amounted to about thirty minutes.

Experiment C. Upon a third portion of the same sample a melting point determination was made in such a way that the rise in temperature was at the rate of 10° C. for each minute of heating. The substance darkened at 200° C. and melted at 232° C. The total time of heating in this case amounted to about twenty minutes.

* Read before Section on Practical Pharmacy and Dispensing, A. Ph. A., Atlantic City meeting, 1916.

Experiment D. In a similar manner a fourth portion of the same sample was subjected to a melting point determination in such a way, however, that the rise in temperature was at the rate of 20° C. for each minute of heating. The salt began to darken at about 210° C. and melted at 235° C. The total time of heating in this case amounted to ten minutes.

The foregoing four experiments were repeated with another firm's product and gave similar results.

The conclusion drawn from these variations in the melting point is that diacetylmorphine hydrochloride slowly decomposes and liquefies at a temperature which varies according to the length of time during which it is exposed to this temperature. Therefore, a fifth experiment was made upon another portion of the sample of diacetylmorphine hydrochloride strictly in accordance with directions of the Ninth Revision of the Pharmacopoeia, for determining melting points. The method is rather elaborate probably too much so for the average pharmacist. It calls for a stirring device, a standard thermometer, an auxiliary thermometer for emergent stem corrections on the main thermometer, together with other rather complicated directions and calculations. Upon closely following out all these directions, repeated determinations upon portions of the same sample yielded similar results. However, no two samples of different manufacturers gave the same melting point. The four samples varied between 228 and 234° C.

The Pharmacopoeia does not mention any allowable loss in weight upon heating in a drying oven. However, the formula of the alkaloid calls for an anhydrous product, and that of the hydrochloride calls for the presence of one molecule of water which is the equivalent of 4.88 percent. The four samples of diacetylmorphine alkaloid were practically anhydrous. Those of the hydrochloride varied from 3.9 to 4.71 percent loss of weight after carefully drying at 60° C. in an oven.

Ash determinations were made on all samples both alkaloid and hydrochloride. In order to obtain a weighable residue two grammes of each sample were used The results were as follows:

Hydrochloride.		Alkaloid	
1	0.080 percent residue	1	0.031 percent residue
2	0.042 percent residue	2	0.036 percent residue
3	0.051 percent residue	3	0.063 percent residue
4	0.072 percent residue	4	0.066 percent residue

The Pharmacopoeia specifies that no weighable ash remains on incinerating 0.5 Gm. of the substance. All samples, therefore, would pass their requirement.

All samples both alkaloid and hydrochloride withstood the tests for presence of "other alkaloids" and ammonium salts.

One sample of the hydrochloride turned slightly dark when dissolved in concentrated sulphuric acid, in accordance with the official requirements, thereby showing the presence of small quantities of "readily carbonizable organic impurities."

The results of the tests for presence of morphine varied somewhat with the different samples used. The test in the Pharmacopoeia reads:

> "Dissolve about 0.05 Gm. of the potassium ferricyanide in 10 mils of distilled water, add one drop of ferric chloride T. S. and then 1 mil of an alcoholic solution of Diacetylmorphine (1 in 100); no greenish or blue color is produced at once." Of the four samples of alkaloid and four of hydrochlo-

ride tested, one sample of the hydrochloride turned distinctly greenish at the expiration of about five seconds. It does not seem quite clear whether such a sample would pass the requirement of not turning greenish or blue at once. The other samples withstood the test for periods of time varying from 15 seconds to 2 minutes.

Conclusion: The foregoing comparisons prove that the requirements of the Pharmacopoeia regarding the purity of diacetylmorphine alkaloid and hydrochloride are by no means too severe and will be easily met by the manufacturers. All the samples most commonly found on the market to-day while showing some variations are of sufficient purity to pass the official tests.

COLUMBIA UNIVERSITY,
COLLEGE OF PHARMACY.

SODIUM CACODYLATE BETTER THAN SALVARSAN.*

It were a good thing if physicians could be made to understand that sodium cacodylate (dimethyl arsenate) will do all that salvarsan and neo-salvarsan can do, while being much safer to handle. However, several years of experience with this remedy, administered intravenously in a wide variety of conditions (and at first, it must be admitted, with many failures), have convinced me that our current dosage is too small. For some time my practice has been never to give less than 10-grain doses, and often even as high as 30 grains, repeating the dose in four days. Those cases that failed to respond to the 10-grain dose have cleared up quickly under the 30-grain dose, and I have never seen any constitutional arsenic symptoms arise from this large dosage.

In treating syphilitic lesions with cacodylates, we should employ mercury either before or conjointly with the cacodylates, otherwise we are likely to produce that spirochete-fixation often produced by the salvarsan preparations, and known as the arsenic-fast condition. In tertiary lesions, iodine should be prescribed in conjunction, inasmuch as iodine is a liberator of encysted spirochetes and the cacodylate an eliminator by way of the lymph and blood streams.

The cacodylates are valuable remedies for many pathologic conditions, including skin diseases, as well as for infections, while the tonic and alterative properties of arsenic are well known.

We should administer more remedies by the intravenous route. The administration of thousands of injections during the course of several years gives me the assurance that this is a rational and safe procedure to follow.

W. N. Fowler.

KALAMAZOO, MICH.

*_Clinical Medicine_, January 1917.

MERCURIC SALICYLATE AND ITS PREPARATIONS AS APPLIED IN PHARMACY.*

BY J. LEON LASCOFF.

In presenting this paper, my object is not to discuss the therapeutics of mercury and its salts, but rather the modes of compounding or preparing prescriptions as presented to us by the medical profession. It is expected of us that the finished product be correct, convenient for use, elegant in appearance, and by all means safe for administration.

A few words of history may be of interest. Dr. H. G. Klotz (Fifty-ninth Annual Meeting of the American Medical Association, June 1908) in his paper on Mercurial Treatment, states that the use of mercury as a remedy was known in the twelfth century, and introduced by an Arabian physician. With the appearance of syphilis in civilized Europe, in 1497, an Italian physician, Caspardo Torella, recommended the use of mercurial ointment for the skin lesion of this disease. During these early periods, the use of mercury was restricted to external use.

About 1535, Pierre André Mathiole initiated the internal use of mercury in the form of the red oxide; later, Van Swieten's Solution, a solution of mercuric chloride, was much used. The protoiodide, first recommended by Biett, was widely adopted at the beginning of the nineteenth century. About the same period, the intramuscular injection of mercury came into vogue and has become firmly established. Dr. Klotz advocated the use of mercuric salicylate (insoluble injections). Dr. Joseph Zeisler of Chicago, remarked the following in discussing the paper of Dr. Klotz: "I began the use of injections of mercuric salicylate about eight months ago; since then, after having given several hundred of these injections, I have been delighted with them."

In *Schmidt's Jahrbücher* of 1891, we find that Szadek, following the teachings of Silva Aronjo, recommended the use of mercuric salicylate. Szadek recommended the following formula:

Mercuric Salicylate	1 Gm.
Mucilage of Acacia	5 mils
Distilled Water	20 mils

J. L. Wollheim in his paper on Painless Mercury Injections (*New York Medical Journal*, July 27, 1912), S. Pollitzer (*N. Y. State Journal of Medicine*, April 1916) and Harlow Brooks (same Journal) have recommended and summarized the results of their experiences with mercuric salicylate.

Wollheim recommends the following suspension of mercuric salicylate:

Suspension VII represents the following formula:

Quinine and Urea Hydrochloride	2.0 Gm.
Distilled Water	2.0 mils
Wool Fat, anhydrous	12.0 Gm.
Mercuric Salicylate	10.0 Gm.
Olive Oil or Liquid Petrolatum to make	100.0 mils

This suspension is one with which most of his injections have been given and is an elegant preparation from a pharmaceutical standpoint.

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* Read before Section on Practical Pharmacy and Dispensing, A. Ph. A., Atlantic City meeting, 1916.

Dr. S. Pollitzer recommends intramuscular injection above all modes of administration as being most efficient and convenient, the preparations to be used being insoluble salts. The customary 10 percent suspension requires too large a volume of the menstruum and therefore he uses $33^1/_3$ percent suspension. He also uses olive oil as a menstruum.

All of these suspensions must be prepared asceptically, as far as possible. The bottles, corks, and all glassware should be previously boiled. There is now in the N. F. IV a chapter on sterilization.

Mercuric salicylate is a white, odorless, tasteless powder containing about 59 percent of mercury. It is insoluble in water and alcohol. Great care should be exercised in keeping it. It is prescribed for extermal use, internally and by intramuscular injections.

There are a good many preparations on the market of mercuric salicylate. One of the best known and most used is "Enesol," Mercuric Salicylarsenate, which is described as an amorphous white salt, holding 38.46 percent of Hg and 14.4 percent As. It is soluble in 25 parts of water. Used in hypodermic injections, 1–2 Cc. of a 3 percent solution.

FORMULAS.

1. Mercuric Salicylate..... 1.0 Gm.
   Mucilage of Acacia..... 0.5 mil
   Distilled Water..... 20.0 mils

   The mercuric salicylate is triturated with the mucilage, and the water is added.

2. Mercuric Salicylate..... 10.0 Gm.
   Olive Oil to make..... 30.0 mils
   For Injection.

   As this preparation is for hypodermic use, sterilization is absolutely necessary.

3. Wollheim VII
   Quinine and Urea Hydrochloride..... 2.0 Gm.
   Distilled Water..... 2.0 mils
   Wool Fat..... 12.0 Gm.
   Mercuric Salicylate..... 10.0 Gm.
   Liquid Petrolatum to make. 100.0 mils

   The quinine and urea hydrochloride is dissolved in the distilled water. The mercuric salicylate is triturated with the anhydrous wool fat. Add the former solution to the triturate and then add gradually the liquid petrolatum.

   No. IX is the same as No. VII but has olive oil.

4. Pills (McDonald)
   Mercuric Salicylate..... 0.6 Gm.
   Extract of Gentian..... 2.0 Gm.

   Make into a pill mass and divide into 30 pills.

   In preparing this pill mass, care should be taken to have the mercuric salicylate uniformly subdivided, the mass soft, and the resulting pill as small as possible.

5. Tablets
   Mercuric Salicylate..... 1.0 Gm.
   Sugar of Milk—sufficient
   Make into 50 tablets

   The mercuric salicylate should be thoroughly triturated with the sugar of milk. Avoid the use of metallic utensils.

6. Ointment
   Mercuric Salicylate..... 3.0 Gm.
   Petrolatum and Wool Fat, each to make..... 30.0 Gm.

   This ointment should be made in a glass mortar. Triturate the mercuric salicylate thoroughly before adding the base.

7. Ampuls
   Mercuric Salicylate..... 10 percent
   Quinine and Urea Hydrochloride..... 0.5 percent
   Liquid Petrolatum..... 1.0 mil

In preparing the ampuls, the ordinary suspension is by no means advisable. It could be prepared in an ointment base like cacao butter. The objection to this, I find, is that it must be warmed before transferring to the syringe. However, when the suspension is made with the addition of lanolin or a few drops of water, (as per Formula 3) a uniform and equal subdivision of doses is found. Each ampul will represent the desired strength.

By far the most convenient and safest method of dispensing, and mercury administration, is in the ampul. The preparations for hypodermic use should be sterilized, the dosage should be exact and there should be no chance for contamination or infection between the container and the hypodermic syringe. All of these requirements are fully satisfied by the ampul. In addition the ampul meets the physician's demand for a convenient container and at the same time the preparations are protected from deterioration.

The ampul, however, should contain a preparation of uniform consistency and be well emulsified and minutely exact as to the dosage. The fresh preparation of such an ampul by the pharmacist will readily appeal to physicians. As stated in my former paper, these ampuls are easily filled and can be produced at a very low cost by pharmacists and in any strength desired by physicians.

HISTORY OF AMERICAN SALICYLIC ACID INDUSTRY SHOWS HARD COMPETITIVE BATTLE.

Salicylic acid is a basic product used in making a number of chemicals for pharmaceutical purposes.

For 20 years American manufacturers of this product fought the German market, which fixed prices on this acid in every country of the world, except the United States, it is said. Prior to 1893 practically all the salicylic acid consumed in this country was supplied by the Germans, who kept the price up to $1.25 a pound. Then came the erection of a factory at St. Louis, which cut the price in half, and the German competitors promptly dropped to 56 cents.

By 1903 the German control of the American market was broken, and the product was sold around 30 cents a pound. Later the American manufacturers were forced to extend themselves, it is contended, to meet competition. The Germans, it is told, tried to get an American producer to withdraw competition if the American concern would pay a yearly indemnity of 10,000 francs, but the offer was promptly declined.

The European war has tied up exports from Germany.

SECTION ON EDUCATION AND LEGISLATION, AMERICAN PHARMACEUTICAL ASSOCIATION

HOW TO STUDY.*

BY FREDERICK J. WULLING.

Mental control is the underlying basis of concentration and concentration is the ability to pay sustained attention to what one hears or reads or studies. We all possess the faculty of concentration, but in only few persons is it well developed. Its development should be begun early in childhood. Many high-school graduates and others of equal or greater maturity have come to my notice who lack to a deplorable degree the capacity of attention. They lack the power to focus attention, to permit their minds to become impressed with what is said to them. No curriculum is adequate that does not necessitate the development of the power of concentration by the enforcement of sustained and intensive attention. I say "enforcement" because experience has taught me that some sort of compulsion is necessary with the average child and older students.

Patanjali is quoted as giving four main stages in the development of the mind: "First, the butterfly mind, constantly flitting from one thing to another; second, the confused mind full of hasty impulses, illy considered thought and immature ideas; third, the mind dominated by a fixed idea, concentrated; fourth, the fixed idea dominated by the man, or the mind under perfect control of the Ego."

This classification, made many centuries ago, holds good to-day; I know of no better modern one. Most students, indeed most men and women, are in the first and second stages; a few are in the third and only occasionally does one find any member of the fourth. Many influences of to-day tend to keep in or put people back into the first and second stages. Witness the schedule in most of the public schools in which subjects are changed every fifteen, thirty, or at best forty minutes; the bulky newspapers of which most of us can read only the headlines; the tremendous increase in the short story literature at the expense of the old and new classics; the movies; etc. While none of these are wholly bad in themselves, in their combined and increasing totality they tend most disastrously away from that concentration of mind which is so essential for individual and national success and growth. Add to this the abstractions, interruptions and diversions of a great part of our average daily life and you have the conditions that create and maintain the butterfly mind, the superficial, shallow, unconstructive, uncreative, leaning, confused mind that is a detriment to the possessor and a distinct liability to the community because it is so numerous and keeps down the average of intelligence and in that measure retards national and universal, to say nothing of the respective individual, development.

In the two higher stages probably only very few, if any, can control and direct all their thoughts, but happily some by persistent effort and will-power have trained their minds to create and control their thought and to direct or focus it

* Read before joint session of Section on Education and Legislation, American Conference of Pharmaceutical Faculties and National Association of Boards of Pharmacy.

according to the wisdom they have. By this power they also, naturally, restrain or regulate, in short, govern their actions and their emotions. They have a *dominating, persistent, constructive will-power.* This brings me to the point of my remarks, namely, that the concentration of the mind upon a given purpose, which is so necessary in the prosecution of study, is based upon a determined, resolute, relentless will-power and sticktoitiveness. I would despair, if I were not convinced that every normal individual can with more or less success develop will-power. This conviction grows out of the fact that I have often had the privilege of helping individuals develop this power. There are those, first, who recognize the existence of will-power: latent in some, sluggish in others and fairly well developed in still others; second, those who do not, or who are hopelessly and helplessly indifferent as to its existence Because I must make my time and energy bear the greatest fruit possible I have never devoted any of them to the latter class. They constitute a field for the most helpful kind of home missionary work for which unfortunately I have no time. Of the former class nearly everyone who came under my direction succeeded at least to a point enabling him or her to graduate and later to pass the board.

You ask what method do I employ? Mostly heart to heart talks with the individuals in which I call attention to the latent abilities in all of us and how their development is dependent upon personal, individual effort and persistent work backed up by the will to do and to accomplish. It is a regrettable fact that most young people nowadays are more anxious to succeed financially than mentally or spiritually, so I dwell on the concentration of mind and will-power as indispensable to the success of the business as well as the professional activity of pharmacists. This I do in the hope that when they have developed some will-power they will also have gained some wisdom to direct their will-power to other or additional ends. I emphasize the fact that the ability to concentrate can easily be developed by giving close attention and the best in us to every little task or activity as well as to the larger, for the little tasks make up the bulk of our lives and by doing them well we more easily create the permanent habit of doing all things well. I also speak of the fact that nature takes care of our physical development, but that it is our individual task and duty and privilege to stimulate our mental growth and that our mental development determines largely our success in life and normally our moral and spiritual evolution, for it is true that with mental increase comes wisdom which prompts a more universal augmentation of our concepts. I mention also the necessity of conserving our energies to get affirmative results from them rather than fritter them away on unimportant and frivolous activities. One of my arguments that usually brings an awakening to the mind of an indifferent student is the statement that the difference between the person who concentrates his whole energy and attention upon his task, be it little or great, and the one who does things indifferently and carelessly is the difference between a systematic, conscious development and heedless, easy drifting with the current; the difference between controlling and being controlled; the difference between the master and the servant.

I also make it clear to the student that if he has the idea that his teachers and others have done all the thinking that is necessary and that he need, therefore, merely memorize statements or quotations, he must abandon it forthwith and

instead decide and learn to think for himself. The concentration upon his work must include sequential, related thinking and reasoning. The student must learn that his mind is an instrument given him to use and develop under the dominance of his wisely directed will. I point out that thinking is sequential and should be based upon reasoning; that each step in thinking a problem out is based upon and made easier by the preceding one and that once this power of building up original thought in his own mind and of feeding consistently his imagination is developed, he will have acquired the power of concentrated attention and application that will make the solution of each subsequent problem progressively easier. I try to be convincing and to obtain the person's good-will and his promise to let me help him and continue my interest in him. I soon learn whether the person in question has the ability to carry out my suggestions or advice. Quite frequently I find a student who is self-willed and obstinate but who qualifies under compulsion. I am an advocate of judicious and wise compulsion and believe it was a serious mistake to eliminate corporal punishment from the schools. While I was an advocate of the elimination at the time, I would now restore it and regulate and control it. I see continually the result of a lack of sufficient compulsion in our public schools in some of the students who come to us and to other colleges. Indeed, many admit that they did not work at school because they did not have to. Some, realizing their deficiencies and handicaps, are incensed at their teachers and parents for not having made them study harder. The compulsion I use consists in assigning certain appropriate home study to be done within a specified time or within a time that requires close application to the work. This work is made a requirement. It is graded and made to fit individual cases, always with the end in view of increasing the student's capacity for concentration and continuity of application and work. To do this and make this requirement is, I believe, a legitimate function of a dean. Of course, this sort of thing ought not to be necessary and would not be if the common and high schools, and parents had done their full duties but the necessity exists and I administer upon it as best I can. It must be recognized that many, probably the majority of students, are mentally and physically indolent if not actually lazy; some are merely slow. But it must also be recognized that they are not wholly the product of their own volition; their environment and especially their lack of training are responsible. The great majority are under insufficient discipline or under none at all and the blame rests upon the parents or those in *loco parentis* and secondarily upon those responsible for our school systems.

In addition to this individual work with those who need it I do some work with the classes along similar lines, including several lectures on psychology, ethics, logic, philosophy, etc., but of this I will speak separately some other time.

Now you may have gained the impression that I am a hard taskmaster, but the fact is nevertheless that I know of none of my students whose good-will and more I have not.

UNIVERSITY OF MINNESOTA,
COLLEGE OF PHARMACY,
MINNEAPOLIS.

ARE PRIVATELY OWNED SCHOOLS AND COLLEGES OF PHARMACY OBJECTIONABLE AND NOT LIKELY TO PRODUCE THE BEST RESULTS?*

BY EDWARD SPEASE.

The above question is one that has interested the writer not a little during the past few years. When the chairman, Mr. Freericks, of the Section on Education and Legislation asked me to submit a paper on one of twenty subjects, the above subject was chosen in order that the writer might ascertain what the opinions of others are upon it.

The question asked and which may be answered in this paper is not one of past tense but is clearly one of the present day. It is certain that the founders of pharmacy, medical and dental colleges in the past have not acted from selfish motives alone; surely some of these motives, or better the major portion of them, have been altruistic and for the advancement of the profession.

Is it not true that the major portion of institutions of learning at one time were privately owned? It certainly is true that such has been the case in regard to professional schools. Public institutions of learning have had to await overtures from the professions before they would include professional curricula, because the leaders in the professions have been interested financially in the privately owned schools. Medical and dental colleges have been entering the large universities quite rapidly in the past decade and so have quite a few pharmacy schools. Has this movement been a backward or a forward one?

One little thought occurs at this point. If graduating to-day, would you prefer a degree from Harvard or Yale to one from a college owned by John Jones? Suppose the said John Jones is recognized as the very topmost man in his profession—the success of his college and its reputation depends upon him and his name. When he dies, a leader of his ability may or may not appear. From which school, then, is the degree worth the more? Would you rather own stock in a small railroad paying high dividends to-day and owned solely by one man than stock in the Pennsylvania System? Which is the better permanent investment? The above questions of course are based upon the fact that the public does take cognizance of the school from which your degree is obtained.

Some of our university authorities have taken the stand that pharmacy is a trade and not a profession and that they do not wish to include with themselves trade schools. From the character of some drug stores to-day, they have abundant grounds for such views. Is not this state of affairs due largely to lack of proper education on the part of the pharmacist?

The physician has rapidly increased the standards of preliminary education and the pharmacist has not kept pace with him. Where is the pharmacy school that requires an A.B. degree for matriculation? How many require the minimum medical demands—two years of approved college work? We are not, however, overlooking this fact and we are tightening up as rapidly as we can, in fact, as rapidly as our large rank and file of non-college men will let us. So long as our schools

* Read before joint session of Section on Education and Legislation, American Conference of Pharmaceutical Faculties and National Association of Boards of Pharmacy.

accept less than high school graduates and our state boards accept the so-called self-made men without college training, just so long must we rank below the physician. This is not a reflection on the self-made man of twenty or forty years ago, times were different then, but it is a reflection upon the lack of education of the profession as a whole in that they have been unable to cope with the times.

How has the medical profession prevented the uprooting of their practice by medical cults, home-medication-patented-fakes, and what not? They have done so by legislation. They can not stem the tide of such growths but can inhibit their activity by legislation and prevent serious inroads upon the educated practitioner. Have we been sufficiently far sighted (educated) to secure proper legislation to prevent the many and various inroads upon our profession? This could have been done if our whole rank and file really stood for better things.

The remedy for this condition is to turn out educated men. Can the privately owned school furnish this education? No, it is impossible. Many university men will be even willing to admit that in strictly pharmaceutical subjects the privately owned schools have been par excellence and indeed in many instances have excelled the university schools. But how about the subjects such as English, Mathematics, Languages, Economics and the so-called cultural subjects? Are they to be utterly ignored if we build up pharmacy? Can these be given by privately owned schools? How about the associations between pharmacy students and students in other courses—are they beneficial or harmful? Indeed this last question might even be asked concerning instructors. Have not the medical and dental professions suffered from the same thing? Do the three professions as men alone rank on a par with other college graduates? In isolated cases, yes, but as professions—do they?

The finger of scorn should not be pointed at the grand old men of our profession nor should they be criticized for the past, as they lived under different conditions then. They will be criticized if they do not join the procession of progress to-day and help to better things for pharmacy.

One other thought remains. It is impossible to furnish complete education at the least possible cost to the most people through privately owned schools, and this is really the fundamental principle of education. Tuition alone will not maintain a school properly. If a profit is made from apparatus used, materials used and lectures given, then we are piling up cost upon the student.

The university is supported by taxation, state appropriation or by endowment. It can furnish in this way more things to the student than can a privately owned school. It certainly is eminently proper that the state pay for the education of its pharmacy men, who help conserve public health, as well as for the education of real estate men and those who enter the insurance business. In case a university receives its support from endowment, this endowment should be sufficiently large so that the student may receive his education at a cost that will be at least as low as that from a university supported by taxation.

All our professional schools should either be integral parts of universities or be so affiliated with them that the student may have the benefits from the university without more cost to him than to any other university student.

We should insist that our Materia Medica teachers should also teach the medical students and that our pharmacy teachers should have at least courses enough among

the medical students so as to inform them of the value of the Pharmacopoeia and the National Formulary. Our medical students should be taught prescription writing by pharmacy men so that they could learn while in school that it is not merely for the sake of getting business for the druggist. Our free dispensaries and clinics should be filled with ethical preparations made by our pharmacy schools and there let the embryo doctor see them and know they are made by pharmacy men. With a few years of this, could the cheap so-called pharmaceutical house sell "just-as-goods" and "twice-as-cheaps" to a trained physician? If the pharmacist and physician gain mutual confidence in each other by this plan of early coöperation, there would then be no room for the detail man who has been taking advantage of the lack of education of both parties.

This paper is intended to invite friendly criticism, not from those who wish to make money from education, but from those who can see that lack of education or education along narrow lines only, is the disease that is undermining ethical pharmacy of to-day.

DEPARTMENT OF PHARMACY,
OHIO STATE UNIVERSITY.

MAKING EDUCATION PRACTICAL.

Agitation is now going on in certain circles designed to make education more practical. This ought not to be difficult of accomplishment. It will strike the average person that the easiest way to bring it about will be to abolish many of the fads now occupying the education school board, and to revert to the fundamentals which occupied the attention of our fathers. It will also strike the average critic that lack of application is one of the gravest evils that afflict our educational system. The average parent and the average teacher have come to believe that a pupil can skim over this and skim over that and retain it. Nothing is farther from the truth. Success in education, like success in everything else, comes from hard work. When we get back to the idea that our pupils in school like their parents out of school must work for the success they attain, we are much more likely to achieve results than we are under our present scheme of doing things.—*Peoria (Ill.) Star.*

STUDENTS MAKE A UNIVERSITY.

We have heard a good deal in the last few days about the troubles with our educational institutions. Some think they are too rich, some think that they are ruled by ignoble interests, by men who are intellectually bound, and others say we should change our system for that of Germany. All this discussion seems rather puerile. There are only two things which make a college or university—teachers and students. Any school in the world can be of the best if the student wishes it. No equipment, however large, is of any value where the student is not minded to work hard. First and last, any student gets out of college life just as much as he puts into it. The trouble is that in these days too few young men are minded to put much into their college life.—*Philadelphia Inquirer.*

SECTION ON COMMERCIAL INTERESTS, AMERICAN PHARMACEUTICAL ASSOCIATION

WHAT IS WRONG WITH THE BUSINESS END OF PHARMACY?*

BY JACOB DINER.

Whenever a subject of popular interest holds the people's attention we can always feel certain that the newspapers of the Metropolis will bring some interviews with prominent actresses, pugilists, beauty doctors and others, who have not the least idea about the subject upon which they are interviewed and are therefore best qualified to offer expert advice. We see the bachelor-girl quoted on how to bring up children; the old maid can tell you how best to hold your husband's affection; the bald man recommends his hair restorer, the twelve dollar a week clerk tells you how to conduct your business so that you may become rich in a short time, and old John D. R. can tell you just how you can live on $1.99 a week and save money on a $2.00 salary. It is for this reason that I do not hesitate to stand here before a collection of the most prominent and most successful pharmacists of this country and endeavor to assay just what is wrong with the business end of pharmacy.

Many men divide pharmacy into two distinct entities: the professional side and the commercial side. Those claiming to be "strictly ethical" generally refute the idea that any such thought as financial success ever enters their minds. They only live and are willing to die for the "Profession" with a capital P. Those who make no pretensions to so-called professionalism are often ashamed to admit that they make splendid use of their professional attainments to the benefit of their patrons and no less to the advantage of their own bank account. So that on one hand we have a collection of pseudo-scientists and on the other hand some rattling good business men who pretend to be ashamed of their profession. Here and there we find men who are not ashamed to make money honestly as business men and who are candid enough to admit that their knowledge of the profession has helped them to make the business successful. I refer to such men as our old war-horse Henry P. Hynson. It is he whom I first heard speak of the "Science of Commerce" and often have I thought of this classification which has since become standard and has found a home in many of our more advanced universities.

The average pharmacist is neither a business man nor a professional man. He is fooling himself while he believes he is fooling the people. Let us take up the average pharmacy and briefly analyze both its business and its scientific methods: As we approach the brilliantly illuminated corner we behold the windows beautifully displaying a half dozen empty cartons advertising somebody's Sure Cure for Sane people. The window space represents perhaps 20 percent of the rent which the proprietor of the pharmacy pays for his store. The article advertised gives him probably 5 percent gross profit. The light, heat, help, insurance, depreciation of fixtures and other overhead expenses, including rent, make the cost of doing

* Read before Section on Commercial Interest A. Ph. A., Atlantic City meeting, 1916.

business not less than 25 percent of the gross receipts. Yet here is a man giving up space, help, light, etc., for the return of 5 percent gross, and he does not even obtain any advertising value out of it for himself or his store, because the man on the next corner and the men for ten or fifteen blocks in either direction are displaying the very same article or similar articles at an equal loss.

Then we wander into the store proper. At least half the shelf-room is taken up by the display of proprietary medicines, the sale of which we know yields a tremendous profit, but to whom? Surely not to the retailer. Again he loses so that the other may gain. A philanthropist pure and simple. But the show cases, surely they will hold something on which a profit may be made, something which will help to establish him with his customers as a pharmacist worthy of their confidence. Let us see. On one case there is a liberal display of Cough Mixture recommended to cure all ills of the respiratory tract from asthma to tuberculosis. Of course the pharmacist has compounded this himself and so is sure to make all the profit that can be made out of it. But let me think. Did I not see that very same preparation in the store down-street and in the store up-street? I sure did. The only difference is that one was labeled: "Made expressly for Jones," and this is "Made expressly for Smith." Each one of these, Jones and Smith, paid a liberal price for the time and labor it took to compound, bottle and label that Cough Mixture. Each one of them recommends "his own" as superior to any other preparation, the composition of which is unknown to him, notwithstanding the fact that it is liberally displayed on the shelves. Jones and Smith are as ignorant of the composition of "his own cough mixture" as he is of *Snookum's Sure Salve for Sore Sides*. And so they go on fooling themselves while they think they are fooling the people.

While we are looking over the show cases in comes a salesman. He represents the wholesale house from which we buy all our goods. Out comes the want book and we order $^1/_{12}$ dozen of this, 3 gross of that, and 1 ounce of something else. There is no attempt to organize the buying end. Could we more profitably buy 1 dozen of this or 10 pounds of that and by so doing save an appreciable amount? Do we feel from reading the market reports, that it would be advisable to lay in our fall stock or our winter supply of this, that, or the other thing? Inasmuch as we used 2 barrels of citric acid last winter, bought in 5-pound lots, when we needed it and paying all sorts of prices, would it not be advantageous to make our contract for it now at the prevailing lower prices? Or inasmuch as we are now dealing with war prices, would it not be better business to buy from hand to mouth only and not order a whole barrel at one time, as we generally do? Those are the little things that we do not think about because, what's the use? We are strictly professional and ethical. But are we? Let us see. Who made up that last lot of Seidlitz powders? O well, we bought that because it is such a nuisance to put them up. But of course we make up our paregoric. Do we? Ask the wholesaler. Neither do we make up our tinctures nor our syrups. Our ointments can be bought much better (?) and much cheaper (?). And anyway, we have no time to waste on these things, we are too busy. Too busy doing what? Cussing out the drug business of course.

DISCUSSION.

ROBERT P. FISCHELIS: I think that Dr. Diner gave a good picture of some drug stores; but I hope that when he said that it was a picture of the average drug store, he was mistaken.

I have confidence enough in the retailer to believe that it does not represent the average store. The young men who are getting into pharmacy are doing so with a much clearer conception of the needs of it. When they watch the proprietor of the store, they see his shortcomings. I have talked to the clerks in a good many old-time stores—stores that have been so long in the place as to have become historical, and in which things were being done in the same way in 1916 as they had been done in 1816; and these young fellows knew just where the trouble was.

Now we have on the one side the people who are advocating scientific management, long accounting systems, etc.; and on the other hand, we have men who care nothing for any business system at all. We are going to strike a happy medium between these two soon, I believe. A prominent man in New York said to me that he thought that accounting was a good thing; but we must remember that he is a retailer with enough business to support two clerks and to keep them pretty busy. Such people do not have time for a lot of book-keeping. They want a short system of doing things.

In our business, we cannot adopt a complicated system, or get along without any at all, so we must strike a happy medium. This is being done in our schools of pharmacy, and the principles taught there are beginning to bear fruit. The younger men are going to adjust themselves to the conditions in some way, so as to make the best of the situation. I have every confidence in the future of the business side of pharmacy.

OTTO RAUBENHEIMER: There is one thing in the paper that struck me very forcibly. Dr. Diner spoke of preparations "Made expressly for" the druggist. This is one of the benefits that we have derived from the Pure Food and Drug Law. Before that law was enacted, practically every pharmacist had these preparations made for him by a manufacturing concern, and had a label put on them stating that they had been made by himself. Now has the pharmacist taken advantage of the fact, that there is something that he can do and make money by it, as well as bring out his own individuality? I do not mean putting up cures for tuberculosis. That is out of the question; but he could put up simple household remedies, and state that they had been made by himself. Let him do this; and if the preparation is any good at all, he will find that these will help in establishing his reputation as a pharmacist.

INTEREST IN THE EMPLOYEE.

The days are passing when the employee was regarded as a mere machine from which to get as much work as possible, without regard to any human reciprocity or interest.

The profit of coöperation between employee and employer is strongly emphasized by the huge earnings of a certain great automobile factory, which were due to the fact that the men and women who worked for it loved it. It treated them fairly, man to man, as friends as well as employees. And they responded.

Employers are finding out that faithful, intelligent employees are the best asset a business can have, and that such employees are not to be secured except by the reciprocal interest and faithfulness of the employer. So it is that the great and far-seeing businesses, among which are the banks, are laying plans to establish closer relations with the men and women in their service.

This is one of the most satisfactory developments of the times. All of us should profit by it, and should do our best to see that the idea gets full publicity. "It will pay your employees, but it will pay you even better," is the argument. Put on this basis, as being good business for all concerned, the idea will appeal with force to all classes. It is time that the discontented, ill-treated and underpaid employees should go, and the employer is beginning to see this for himself.

But don't forget that some of the reciprocating must be done by the employees.—*Bulletin.*

AN APPEAL TO THE RETAIL DRUGGIST TO TAKE A GREATER INTEREST IN THE MANUFACTURE OF U. S. P. AND N. F. PREPARATIONS.*

BY ZEB W. RIKE.

This is written from the standpoint of the retail druggist in the smaller towns, but I am sure conditions which prevail here, in a measure, correspond to those in the larger stores in the cities. In this day of commercialized pharmacy one is necessarily forced to keep pretty well stocked with pharmaceuticals of the various manufacturing houses, but with a little extra effort, judicious advertising and sampling among our local physicians, this condition can be largely overcome by the manufacture of many U. S. P. and N. F. preparations which are prescribed every day, and which can be very easily made, even in a drug store where conditions are such that there is no laboratory in connection or where the druggist has no great amount of equipment for this work.

We often hear the cry from the old-time druggist that, times have changed so radically there is not so much money in the drug business as twenty years ago. That, perhaps, from their viewpoint, is in a measure true. But should we as a profession be content to sit idly by and listen to the croakings of these pessimists, and at the same time allow the large manufacturing concerns to reap the profits which are rightly ours, or strive to go forward putting our best efforts into action in an endeavor to make these things which should be made in our establishments?

I have found in my experience that many of these preparations which are prescribed daily and which are as staple as flour, can not only be made more cheaply than the manufacturer will sell them, but in many cases they are more elegant preparations. I know druggists who prefer to purchase from a wholesaler such simple things as aromatic elixir rather than to take the time to make it. Think of such a sad state of affairs. For the advancement of the profession of pharmacy a person can not afford to let these things pass. From my way of thinking the druggist who says he can buy the above mentioned elixir, and many other preparations, for that matter, as cheaply as he can make them, and also that he does not have the time for doing so, is in the same deplorable condition as the farmer who would contend, it would be better financially for him to allow the other fellow to raise his cotton, feedstuff, etc.

I do not charge this class of druggists with ignorance, but to be as lenient as possible they are woefully indifferent to the opportunities presented them every day. It is an established fact that the lines of least resistance are more easily followed, and when we once get in a rut it is pretty difficult to overcome the compelling desire to remain in it. The chief arguments these men use against making these preparations are the element of time, inability to successfully and correctly make them, and the lack of coöperation on the part of the physician who prefers to have some old established manufacturing concern compound them.

First, take the element of time. In the average small town drug store time

* Read before Section on Commercial Interest, A. Ph. A., Atlantic City meeting, 1916.

very frequently hangs very heavily upon us—that is, those who do not desire to sit all day and discuss the faults of our government, etc.—and we could not only add financially to our business, but at the same time store up further information to our little stock of pharmaceutical knowledge. Not infrequently the clerk and proprietor both have ample time to delve into the Pharmacopoeia and the National Formulary and work up these excellent formulae. Then again the proprietor is often heard to make the remark that when his clerk's time is taken into consideration along with the price of the ingredients entering into these preparations, the finished products will cost as much as the jobber sells them for. And at the same time if we should endeavor to convince that same misguided individual that he should carry his prescriptions to his competitor across the street to be filled, he would in all probability take us for a mental weakling. There can be no element of time to be considered when a clerk is paid a stipulated monthly salary for his work, and where he necessarily has many hours of idle time that should be spent to advantage. And we all know the small druggist can not afford to employ a pharmacist for prescription work only. Consequently, aside from the prescription end of the business, he occupies every position from porter to proprietor, and still has quite an abundance of time which could be used profitably. But should this time be taken into consideration from a financial viewpoint, these preparations could still be made more cheaply than they could be purchased from the wholesaler. I will quote only a few of the ones which I make and which I am sure is true of most U. S. P. and N. F. preparations: Elixir Digestivum Compositum N. F. (III), Elixir Ferri, Quininae et Strychninae N. F., Unguentum Resorcinolis Compositum N. F., Unguentum Zinci Oxidi U. S. P., Liquor Antisepticus Alkalinus N. F., Liquor Antisepticus N. F. and Liquor Cresolis Compositus U. S. P. It is hardly necessary to quote figures on the probable cost of these preparations, but by consulting the formulae, getting the prices of the various constituents and comparing the cost of the finished product with that of the manufacturer it can be seen at once the saving to be made.

The argument that a druggist cannot make them is about the most deplorable idea, to my mind, that a person could entertain. I would not want to charge these men with such a gross degree of ignorance, but if this is true, and we will accept the statement from them, then these same druggists have admitted their inability to successfully compound a physician's prescription. If he has the qualifications to fill correctly a prescription, he certainly can take the Pharmacopoeia and with the explicit directions given therein make the various preparations which are outlined.

I have found the physicians in my locality always eager to coöperate with the druggists in prescribing preparations of which they know something regarding the constituents. Very few of them would insist on a certain manufacturer's Elixir Iron, Quinine and Strychnine, etc., when the careful and discerning pharmacist would take the pains to show them the formulae for these preparations which he makes. And to further gain their confidence, take them with you behind your prescription case or in your laboratory if you are so equipped, and show them these things in the making. Let them see, not only the U. S. P. and N. F. formulae which you are using, but insist that they see the ingredients incorporated. It is, in a measure, true as many claim, that the physician does not coöperate with

the druggist as he should, but before we too severely criticize him we, in justice to his profession, must admit that as a profession we do not bring ourselves into as close relationship with him as we should. If we would take more interest in the manufacture of these preparations of the U. S. P. and N. F., then sample the local physician as do the large manufacturing concerns and otherwise keep these products before them, I have no doubt but that the pharmacist would come into his own.

ESSENTIAL OILS AND IMMUNITY.

From very ancient times various aromatic and pungent substances have been regarded as possessing prophylactic powers in some measure. It is curiously interesting, therefore, to learn that modern bacteriologists have discovered that in certain cases of infectious disease some of the essential oils such as those of cinnamon, cloves, mustard, garlic, thyme, and marjoram, not only possess bactericidal power, but may even be made to confer immunity when injected like serums. Certain investigations of this highly complex subject recently made by Mr. F. d'Herelle of the Pasteur Institute are reported in the *Bibliothèque Universelle* (Lausanne) for June. He said:

"There is a bacillus belonging to the group of the paratyphics, the *bacillus typhi murium*, which is naturally pathogenic for white mice. Many attempts have been made to render it inoffensive for these little creatures by vaccinating them with a product containing dead bacilli; but the project has always failed though attacked in the most various fashion.

"Mr. d'Herelle then asked himself whether this failure was not due to the manner in which the bacilli had been killed, and, therefore, sought some new method. In the course of his investigations it occurred to him to kill the bacilli meant to serve as a vaccine by means of essences (essential oils), as had been done by Mr. E. Roux. This process has the advantage, according to the eminent bacteriologist, of not altering the albuminoid matters and the diastases contained in the substance of the microbes. . . . . No attempt had hitherto been made to prepare vaccines with bacilli killed by essences. Mr. d'Herelle found by experiment that vaccines thus prepared from the essences of cinnamon, garlic, thyme, marjoram, cloves, and mustard were active in certain conditions.

"Thus a white mouse into which is injected a vaccine containing from 500,000 to 10,000,000 corpses of bacilli slain by the essence of mustard is immunized against mortal, and even very 'super-mortal' doses of the living bacilli. But these limits must be maintained with great care in order to obtain immunity, and care must be taken to give a stronger dose to a young mouse than to an adult. For if the dose of 10,000,000 be surpassed, the immunity obtained is very feeble, with little resisting power, and the more the dose is surpassed the weaker the immunity, apparently. On the other hand, the dose must consist of not less than half a million, thus a dose of 150,000 bacilli confers no immunity. It is also useless to try to obtain immunity with a number of successive doses, superior to 10,000,000; the result is *nil*, as if one had done nothing. To resume, the essence of mustard gives a very active vaccine, in this particular case, against hundreds of mortal doses of virus, provided the immunizing doses are confined within the given limits."

SECTION ON HISTORICAL PHARMACY, AMERICAN PHARMACEUTICAL ASSOCIATION

THE PHARMACY AND MEDICINE OF SIR WALTER SCOTT.*

BY ARTHUR W. LINTON.

Then in what robes of honor habited
The laureled wizard of the North appears!
Who raised Prince Charlie's cohorts from the dead
Made Rose's mirth and Flora's noble tears,
And formed that shining legion at whose head
Rides Waverly, triumphant o'er the years.
—*Joyce Kilmer.*

There may be those who will consider a paper upon the above subject as not strictly entitled to a place among the contributions to the Historical Section. Although Scott's works are, of course, not histories, there is much of history contained in them. Sir Walter Scott was an antiquarian of remarkable ability, one who studied with painstaking care the records of the customs, manners and usages of bygone days, especially those of his own beloved Scotland. Possibly his portrayal of the practice of pharmacy and medicine in the periods of which he writes is as accurate as it is possible to obtain.

Although physicians and apothecaries are found less frequently in Scott's works than are their brethren of the clerical and legal professions, yet we may believe that Sir Walter was familiar with much that pertains to medicine. His maternal grandfather was a physician, a member of the medical faculty of the University of Edinburgh, and Scott counted among his intimate friends a number of physicians.

In *Rob Roy* we find a picture of the Glasgow surgeon apothecary of 1715 or thereabouts. The hero, Frank Osbaldistone, having been wounded in a duel, relates his experience as follows: "I stopped at a small unpretending shop, the sign of which intimated the indweller to be Christopher Neilson, surgeon and apothecary. I requested of a little boy who was pounding some stuff in a mortar, that he would procure me an audience of this learned pharmacopolist. He opened the door of the back shop, where I found a lively elderly man, who shook his head incredulously at some idle account I gave him of having been wounded by the button of my antagonist's foil breaking while I was engaged in a fencing match. When he had applied some lint and something else he thought proper to the trifling wound I had received, he observed: 'There never was any button on the foil that made this hurt. Ah, young blood! young blood! But we surgeons are a secret generation. If it were not for hot blood and ill blood what would become of the learned faculties?' "

The *Fortunes of Nigel*, the scene of which is laid in the London of James I, introduces us to the apothecary of that period. In the opening chapter, Richard Moniplies, serving man to the hero of the story, and who has just arrived from Scotland, becomes the butt of the prentices of Temple Bar. "The probationary

* Read before Section on Historical Pharmacy, A. Ph. A., Atlantic City meeting, 1916.

disciple of Galen, who stood at his master's door in his flat cap and canvas sleeves with a large wooden pestle in his hand," accosted the somewhat bewildered Scotsman as follows, " 'What d'ye lack sir? Buy a choice Caledonian salve, *Flos Sulphur, cum butyro quant suff!*' "

Poor Richard a little later becomes engaged in a brawl with some of the impudent prentice lads, and is injured. Like the victim of a present-day street accident he is carried to the apothecary for first-aid treatment. Not the apprentice, but the apothecary himself, Mr. Raredrench, ministers to the needs of the wounded man. This gentleman had rather more lore than knowledge, and began to talk of the sinciput and occiput, and cerebrum and cerebellum. One of the bystanders asked the apothecary whether bleeding might not be useful, when after humming and hawing for a moment, and being unable on the spur of the moment to suggest anything else, the man of pharmacy observed " 'that it would at all events relieve the brain or cerebrum in case there was a tendency to the deposition of any extravasated blood.' "

The Abbot is a story of Mary Queen of Scots. A most interesting character of the story is Dr. Lundin. The Doctor's office was cumbered with "stuffed birds and lizards and bottled snakes and bundles of simples made up, and other parcels spread out to dry, and all the confusion, not to mention the mingled and sickening smells incidental to a druggist's stock in trade, * * * also heaps of charcoal, crucibles, bolt-heads, stoves and the other furniture of a chemical laboratory." Dr. Lundin is indignant at the sight of the clown " 'who, having the strength of a tower, has lived fifty years in the world and never encouraged the liberal sciences by buying one pennyworth of medicaments.' " On the other hand, the worthy Doctor is moved to admiration of a peasant with swollen legs and most cadaverous countenance, who, says the Doctor, " 'breakfasts, luncheons, dines and sups at my advice, and not without my medicine, and for his own single part will go farther to clean out a moderate stock of pharmaceutica than half the country besides.' "

Dr. Lundin is loud in his denunciation of old women who disturb " 'the regular progress of a learned and artificial cure with their syrups and their juleps and diascordium and mithradate and my lady what-shall-call-um's powder, and worthy Dame Trashem's pills, * * * and cheat the regular and well studied physician.' "

Very numerous in Scott's stories are the wise old women, who with charms and simples are prepared to minister to the ills of mankind. Among such were old Euphane Fea of *The Pirate*, "who was well versed in all the simple pharmacy used by the natives of Zetland," and Ailsie Gourlay of the *Bride of Lammermoor*, "whose pharmacopoeia consisted partly of herbs selected in planetary hours, partly of words, signs, and charms which sometimes produced a favorable influence upon the imagination of the patients."

However, in the rough warlike times of which Scott wrote, not only were the wise women of the villages possessed of knowledge of simple remedies, but frequently ladies of quality, and even of the nobility, were versed in the healing art. In an age when men of medicine were few, and when strife and bloodshed were all too common, it frequently became the duty of some noble dame or damsel possessed of slight knowledge of medicine and surgery to bind up the wounds of the warrior.

In *A Legend of Montrose*, a story built around the brilliant campaigns of the

Marquis of Montrose during the Cromwellian wars, we find a picture of Annot Lyle "superintending the preparation of vulnerary herbs to be applied to the wounded, receiving reports from different females respecting those under their separate charge, and distributing what means she had for their relief."

Critics have judged that in all the wide range of fiction there is no more beautiful character of a daughter of Israel than that of Rebecca in *Ivanhoe*. Every reader of this, probably the best known of Scott's stories, will remember Rebecca's defiance of the advances of the crafty Templar, Brian de Bois Gilbert. It will be remembered also that Rebecca possessed some knowledge of medicine. In the words of Isaac, her father, " 'I well know that the lessons of Miriam, daughter of the Rabbi Manasses of Byzantium, * * * have made thee skilful in the art of healing, and that thou knowest the craft of herbs and force of elixirs.' "

It was through the ministrations of Rebecca, and the application of a marvelous warming and spicy smelling ointment that Ivanhoe was cured of the desperate wounds received in the tournament. Later in the story Rebecca is accused of witchcraft, and "two mediciners, a monk and a barber, being questioned in regard to the balsam, which in the hands of Rebecca had effected many cures, testified that they knew nothing of the materials excepting that they savored of myrrh and camphire, which they took to be oriental herbs. But with true professional hatred of a successful practitioner, they insinuated that since the medicine was beyond their own knowledge it must necessarily have been compounded from an unlawful and magical pharmacopoeia."

It may be of interest to note that the original of the character of Rebecca was Miss Rebecca Gratz of Philadelphia. This young lady was a very dear friend of Miss Hoffman, the fiancée of Washington Irving. Miss Gratz, although beautiful and accomplished, gave her life to philanthropy and was known for her good works. By Irving her character was described to his friend Scott, who made use of it as has been stated. A picture of the life of the real Rebecca is given in the answer of Rebecca of York, when being asked by the Saxon Rowena whether the Jews maintained convents, Rebecca replied, " 'No, lady, but among our people since the time of Abraham downwards, have been women who have devoted their thoughts to Heaven and their actions to works of kindness to men, tending the sick, feeding the hungry and relieving the distressed. Among these will Rebecca be numbered.' "

Turning from *Ivanhoe* it is fitting that we glance next at that other tale of Richard Couer de Lion, *The Talisman*. The scene of this story is laid in Palestine at the time of the Third Crusade. At that period the Moslem nations were in many respects superior in intelligence to the people of western Europe. The soldiers of the Cross, by contact with their foes, gathered much of the learning of the East, and this came to have a profound influence upon European civilization. In *The Talisman* we are given a glimpse of the Moslem medical practice of that day as conceived by Scott. El Hakim, an Arabian physician, who later proves to be the Sultan Saladin in disguise, enters the fever-stricken camp of the Christians and works marvelous cures. He is led to the bedside of Richard of England, himself prostrated by the fever. After learning the symptoms and observing the pulse "the sage next filled a cup with spring water and dipped into it the small red purse. * * When he seemed to think it sufficiently medicated he

was about to offer it to the sovereign, who prevented him by saying, 'Hold an instant, thou hast felt my pulse, let me lay my fingers on thine.' * * 'His blood beats calm as an infant's,' said the King; 'so throbs not theirs who poison princes.' "

The king recovers under the treatment and is profoundly impressed with the marvelous value of the medicine or 'talisman.' "'A most rare medicine,' said the King, 'and a commodious, and as it may be carried in the leech's purse, would save the whole caravan of camels which they require to carry drugs and physic stuff.' "

Later in the story, El Hakim, in treating the sick and wounded knight Sir Kenneth, makes use of what we may understand to be opium. The physician thus describes his remedy: "'This is one of those productions of Allah sent on earth for a blessing, though man's wickedness and weakness have sometimes converted it into a curse. It is powerful as the winecup of the Nazarene to drop the curtain on the sleepless eye and to relieve the burden of the overloaded bosom, but when applied to the purposes of indulgence and debauchery, it rends the nerves, destroys the strength, weakens the intellect and undermines life.' " We are given also a picture of the patient's sensations as he passes under the influence of the opium. "Sleep came not at first, but in her stead a train of pleasing but not of rousing nor awakening sensations. A state ensued, in which, still conscious of his own identity and his own condition, the knight felt enabled to consider them not only without alarm and sorrow, but as composedly as he might have viewed the stories of his own misfortunes acted upon a stage; or rather as a disembodied spirit might regard the transactions of its past existence. From this state of repose, amounting almost to apathy concerning the past, his thoughts were carried forward to the future, which in spite of all that existed to overcloud the prospect, glittered in such lures, as under much happier auspices his unstimulated imagination had not been able to produce, even in its most exalted state. * * * Gradually as the intellectual sight became more clouded, these gay visions became obscure, like the dying hues of sunset, until they were at last lost in total oblivion."

Sir Walter Scott, true lover of dogs as he was, describes most graphically El Hakim's surgical treatment of Sir Kenneth's noble hound which had been wounded by a spear thrust. "The physician inspected and handled Roswal's wound with as much care and attention as if he had been a human being. He then took forth a case of instruments, and by the judicious and skilful application of pincers, withdrew from the wounded shoulder the fragments of the weapon and stopped with styptics and bandages the effusion of blood which followed, the creature all the time suffering him patiently to perform these kind offices as if he had been aware of his kind intentions."

There are found in a number of the Waverly novels some most interesting references to the home remedies used in treatment of domestic animals. In the *Bride of Lammermoor*, Bucklaw recommends to his friend Ravenswood the following remedy for a lame horse: "'Take a fat, suckling mastiff whelp, flay and bowel him, stuff the body full of black and gray snails, roast a reasonable time, and baste with oil of spikenard, saffron, cinnamon, and honey, anoint with the dripping, working it in.' "

In *Heart of Midlothian* we find Jeanie Deans, an humble Scottish dairy maid,

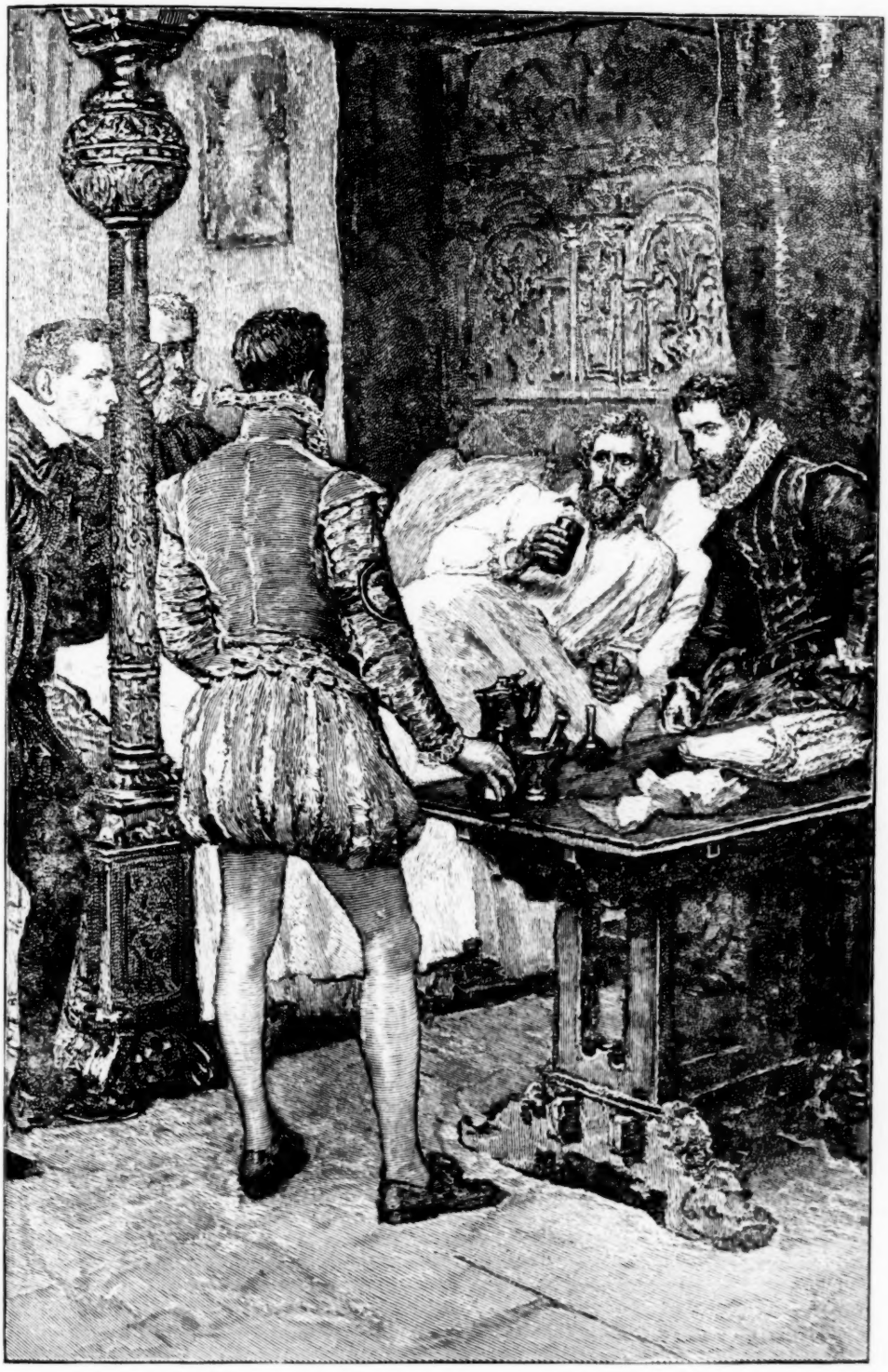
making a toilsome pilgrimage to London to seek a pardon for her condemned sister. True to her thrifty Scotch character, Jeanie does not fail to pick up useful information along the way. She writes to her father, the cow-feeder of St. Leonard's as follows: " 'I learned from a decent woman, a grazier's widow, that they have a cure for the muir ill in Cumberland, which is one pint of yill (ale) boiled wi' sope and hartshorn drops, and toomed down the creature's throat wi' ane whorn. Ye might try it on the bauson-faced year old quey, an it does nae gude it can do nae ill.' "

Then, too, there are the horse-balls which Sir Henry Lee, remembered by all readers of *Woodstock*, relied upon to save Charles Stuart when he was hard pressed by Cromwell's troopers. " 'In this box,' said he, 'are six balls prepared of the most cordial spices, mixed with medicaments of the choicest and most invigorating quality. Given from hour to hour, wrapt in a covering of good beef or venison, a horse of spirit will not flag for five hours at the speed of fifteen miles an hour.' "

For a remarkable portrayal of the sixteenth century alchemist we may turn to the pages of *Kenilworth*, the sad story of poor Amy Robsart. One of the characters of this tale is Dr. Dooboobie, otherwise known as Alasco, who " 'gathered night maddow and male fern seed through use of which men walk invisible, pretended some advances toward panacea or universal elixir, and affected to convert good lead into sorry silver.' " " 'He was a learned distiller of simples, and a profound chemist—made several efforts to fix mercury, and judged himself to have made a fair hit at the philosopher's stone.' " This Alasco is a scoundrel, and is employed by the villainous Varney to poison not only Amy Robsart, but the Earl of Sussex. For this purpose Alasco makes use of his Manna of St. Nicholas, a slowly acting poison.

The machinations of Varney and his tool Alasco are foiled in great measure by Wayland Smith, a former pupil of Alasco, who knows the antidote for the Manna of St. Nicholas. Most interesting is the account of Smith's search through the drug shops of London for the various ingredients of the antidote. One of these, very rare and difficult to obtain, after rejecting many substitutes, Smith finally discovers in the shop of old Yoglan, a Jewish apothecary. " 'Have you scales,' said Wayland. The Jew pointed to those for common use. 'They must be other than these,' said Wayland. The Jew hung his head, took from a steel plated casket a pair of scales beautifully mounted, and said as he adjusted them, 'With these I do mine own experiment. One hair of the High Priest's beard would turn them.' 'It suffices,' said the artist, and weighed out two drachms for himself of the black powder." Later Wayland "obtained from the cook the service of a mortar, shut himself up in a private chamber, where he mixed, pounded and amalgamated the drugs each in its due proportion—with an address that plainly showed him well practiced in all the manual operations of pharmacy."

Wayland Smith was frank to acknowledge that he had commenced his practice by treating horses, gradually extending his field to human patients. For he says, " 'The seeds of all maladies are the same, and if turpentine, pitch, tar and beef suet, mingled with turmerick, gum mastic and one head of garlick can cure the horse that hath been grieved with a nail, I see not but what it may benefit the man that hath been pricked with a sword." He was especially renowned for a cure for bots in cattle, which noted remedy was described by Jack Hostler as smelling and tasting like " 'hartshorn and savin mixed with vinegar.' "



The Earl of Sussex takes Wayland's Potion—*Kenilworth*. Waverly Novels, Dryburgh Edition, Adam and Charles Black, London.

A number of references are found in Scott's works to smallpox and the modifications in the treatment of this dread disease which came to pass as superstition was gradually replaced by science. In *The Surgeon's Daughter* we find a description of the treatment commonly followed in the middle of the eighteenth century. "It is well known that the ancient way of treating smallpox was to refuse the patient everything which nature urged him to desire, and, in particular, to confine him to heated rooms, beds loaded with blankets, and spiced wine, when nature called for cold water and fresh air." The young physician Hartley, in treating the family of General Witherington, introduces more modern practices. "Windows were thrown open, fires reduced or discontinued, loads of bedclothes removed, cooling drinks superseded mulled wine and spices. Doctors Tourniquet and Lancelot retired in disgust, menacing something like a general pestilence in vengeance of what they termed rebellion against neglect of the aphorisms of Hippocrates. Hartley proceeded quietly and steadily, and the patients got into a fair road to recovery."

In *Heart of Midlothian*, when Jeanie Deans meets the queen, we read: "The lady who seemed the principal person had remarkably good features though somewhat injured by the smallpox, that venomous scourge which each village Esculapius (thanks to Jenner) can now tame as easily as their tutelary deity subdued the python."

The Surgeon's Daughter, already referred to, pays a splendid tribute to the Scottish rural physician of the eighteenth and early nineteenth centuries. "This humble practitioner, if he does not find patients at his door, seeks them through a wide circle. Like the ghostly lover of Bürger's Leonora, he mounts at midnight and traverses in darkness paths which to those less accustomed to them seem formidable in daylight, through straits where the slightest aberration would plunge him into a morass. . . . In short there is not any creature in Scotland that works harder and is more poorly requited than the country doctor unless, perhaps, it may be his horse."

Dr. Gideon Gray was a man of this type, whose annual income approached two hundred pounds a year, for which he traveled about five thousand miles upon his ponies Pestle and Mortar, which he rode alternately. "He was of such reputation in the medical world that he had been more than once advised to exchange Middlemas for some of the larger towns of Scotland, or for Edinburgh itself. This advice he had always declined."

There is every reason to believe that the original of Dr. Gray was Dr. Clarkson of Selkirk, Scott's own physician, who pursued his noble career for more than half a century. He never refused by night or day to answer a call to the home of the humblest dweller in all that wild border country, and like other self-sacrificing physicians of all ages and countries, ministered in countless cases where there was no hope of recompense.

Many other references to matters medical and pharmaceutical are found in the Waverly novels, but a sufficient number have been quoted. If in most of those given we find much superstition mingled with a little knowledge, we must bear in mind that all through the centuries practitioners of medicine and pharmacy, like the followers of other sciences, have been shackled by the bonds of ignorance, and that it is only during the last few decades that medicine in its various branches is at last being placed upon a truly rational basis.

WOMEN'S SECTION, AMERICAN PHARMACEUTICAL ASSOCIATION

MINUTES OF FIRST SECTION.

The first session of the Women's Section of the American Pharmaceutical Association was called to order in Hotel Chalfonte, September 5, 1916, 3 o'clock P.M., by the President, Mrs. G. D. Timmons.

THE PRESIDENT: The Invocation will be given by the Reverend Henry Merle Mellen.

REV. HENRY MERLE MELLEN: We give thee hearty thanks, our Heavenly Father, that thou hast preserved our lives, and given us an abundance of strength, that thou hast set us in this world to be thy witnesses, to make sure of the ways and means which thou hast given us in this world. We thank thee that thou dost not only give us life, but thou dost give us means to sustain life. We thank thee that thou dost not only render us a full measure of health, but that thou hast established the ways and means whereby that health may be prolonged. We thank thee that this afternoon these worthy women are gathered in that capacity to study the ways or the means whereby the health, and strength of our race may be prolonged. We ask, therefore, that thy blessing may attend their deliberations. Bless these thy handmaidens, we beseech thee, and grant that of the kindred graces that attach to this assembly there may be these higher and truer endeavors whereby those who are in need and those who are in ill health may be restored to that bright earth. So we commend all these deliberations to thee, and pray that thou will walk in the midst of thine handmaidens. Bless their coming in and their going out. Bless them in the name of Him, who went about doing good, who healed all manner of diseases, and who came into this world to save a sin-sick and heart-sick and soul-sick race, even this is Christ our Lord. Amen.

THE PRESIDENT: Mrs. George M. Andrews of this State will give the address of welcome.

MRS. ANDREWS: Madam President, ladies of the Women's Auxiliary of the American Pharmaceutical Association: We, the women of the New Jersey Society, wish to extend formal greetings of Atlantic City and of our State. We want to be your hostesses in the fullest extent, to assist you in obtaining the most benefit and pleasure possible from your pilgrimage to this our City by the Sea. We feel, however, we have comparatively little to offer after participating in the splendid entertainment extended to us in Detroit the Beautiful, with her environment of water, or Denver with the grandeur of her mountain scenery, or the mystic charm of the City of St. Francis with her wonderful exposition to appreciate and entertain you last year, but we bid you a most cordial welcome and, after all, you know there is only one Atlantic City. Her charm has been told by song and solo. As you glide along the Boardwalk in your chair or take your morning stroll the cupids in the briny will be watching for you. The Piers wile us with their music, but our husbands, engaged in scientific discussions until they are suffering from near brain fag, will need our deepest solicitude and constant companionship

because the "chickens" of the Great Wooden Way can scarce resist such attractive men.

But don't let those matters detract from your enjoyment for you will realize they are mere trifles when you know the reason we are so glad to welcome you here is that there is nowhere a land so fair as in New Jersey, so full of song, so free from care as in New Jersey, and I believe that Happy Land the Lord has prepared for mortal man is built exactly on the plan of old New Jersey. (Applause.)

THE PRESIDENT: We will now have a vocal solo, "An Open Secret, Woodman," by Miss Margaret F. Martin.

THE PRESIDENT: I wish to announce the following committees: On nominations: Mrs. Godding, Mrs. Whelpley, Mrs. Dye, Miss Cooper, and Mrs. Holzhauer.

On resolutions: Mrs. Ruddiman, Mrs. Kenaston, Mrs. Apple, Mrs. La Wall, and Mrs. Peacock.

Mrs. Ruddiman, will you take the chair, please, while I read my address.

(Mrs. Ruddiman takes the chair.)

ADDRESS OF PRESIDENT MRS. G. D. TIMMONS.

It is with great pleasure that I extend greeting to the Women's Section of the American Pharmaceutical Association. We appreciate very highly the hearty welcome accorded us, and we know that our stay here will be an enjoyable one, for this is an ideal meeting place. It is a high privilege to be the guests at this Atlantic Sea-board State and at this noted resort.

We have been looking foward with delight to our vacation time. During the hot days of summer, the thoughts of the cooling breezes and the ocean plunges have been both restful and refreshing. These are, as Van Dyke says, "Our real days off." But the greatest delight was found in the memories of past sessions and the pleasant anticipation of again meeting friends and acquaintances.

It is a splendid thing for women to come together in this way. The pleasure of meeting one another, the exchange of views, words of encouragement and the plans for greater usefulness are all very helpful to us and serve as a stimulus for the rest of the year.

The Biennial at New York City (I need not apologize for mentioning this great meeting) was a wonderful inspiration to women all over the country, but especially to the women of the East, as they were able to attend in such vast numbers. It made clear to everyone that women's organizations are practical and that they exist because organization means coöperation, and cooperation, added service. Service has come to be the slogan in women's organizations. It is said that women have the true idea of democracy. "They know that it only means kindness and an entering into the needs and problems of other human beings."

The leaders of the American Pharmaceutical Association (the great men in pharmacy with whom we are privileged to be co-workers) show that they keep abreast with the progress of the times along different lines of endeavor, when they ask the women to join them as a section in this great organization; an organization that stands for all that is best and highest in scientific pharmacy.

So while we may feel somewhat discouraged in that we have not accomplished what we set out to do, I prophesy the Women's Section has come to stay and that the near future will see it well established, with a large attendance, and find it helping to solve real pharmaceutical questions, as well as aiding the American Pharmaceutical Association in a material way.

For the present, the best plan seems to be, to have programs of such a nature that they will appeal to all and attract more and more of our sisters to these meetings, and after that, devote most of our energies toward getting new members for our Section and for the Association.

Still, when we hear so many splendid ideas advanced, it seems that they must be carried out at once—yet, every cause must have time to grow, and slow growth is not a bad thing. In apparent inaction there is often unseen growth. Later, many, and it may be, all of these plans may be carried out with good effect.

SOME OF THE OFFICERS OF WOMEN'S SECTION A. PH. A.—Top row, left to right, Mrs. Edsel A. Ruddiman, *President;* Mrs. Jean M'Kee Kenaston, *Secretary;* Mrs. Eben G. Fine, *First Vice-President.* 2nd row, Mrs. Franklin M. Apple, *Treasurer;* Mrs. George M. Beringer, *Second Vice-President.* 3rd row, Mrs. Fletcher Howard, *Third Vice-President;* Miss Bertha Ott, *Historian;* Mrs. G. D. Timmons, *Chairman Executive Committee.* 4th row, Miss Anna G. Bagley, *Chairman Membership and Press Committee;* Mrs. John Culley, *Chairman Outlook Committee.*

I believe many women are already interested in this Section. Surely women pharmacists enjoy the fellowship of those engaged in the same profession as well as the friendship of the women whose husbands are members of the American Pharmaceutical Association. There is no other way by which they can become so well acquainted. Why should not we, who are the wives of pharmacists, or the wives of those vitally interested in pharmacy, want to get better acquainted with the wives of our husbands' friends and co-workers?

While the men are busy at their various meetings and only a few are able to attend our sessions, our papers and reports are printed in the JOURNAL (the official organ of the American Pharmaceutical Association) and every one who is a member of the Association has a chance to read the ideas and opinions of the women interested in pharmacy. This is surely an opportunity for the women to help improve conditions.

We firmly believe that pharmacy is a good field for women, inasmuch as "woman's work is any useful thing that she can do well." She has long since proven her capability and adaptibility to do such work "well." For my part, I have much admiration for women who take up pharmacy as a profession: They are the women of initiative and show superiority in a variety of ways.

Just a word with reference to one angle of the publicity campaign. Women pharmacists are far too modest, as efforts, to get material concerning women in pharmacy, say for Mrs. Wallace's page in the *Pharmaceutical Era*, have proven. This does not seem quite the right attitude to take, for just such notices and articles may be an incentive to young women who are in search of a profession. It is manifestly well to bring before them the successful careers of our women pharmacists.

And now in our day of greater advancement, at a time when every pharmacy school demands a high school requirement for admission, and offers a better arranged curriculum than ever before, it is a double inducement to the young woman to adopt this profession.

Again, there were women this year whose husbands are prominent members of the American Pharmaceutical Association, who did not know they were eligible to membership in our section. It was suggested last year that a card be sent out to the wives of the members, saying "You are a member because your husband is." You will readily see a *certain* difficulty that might arise. Might this not be obviated by writing to the men of the Association, with whom the writer was not acquainted, asking them if there was a mother, wife or sister in their immediate family, and if so, request him to inform her that she was, automatically, a member of the Women's Section. Also ask that her name and address be sent to our Secretary.

I wish to recommend first, that the membership and press committees be combined. The chairman of the different districts would be in a position to appoint a press member, and this press member would be under the supervision of the general chairman of the Membership Committee.

Second, that the Executive Committee assign and supervise the work of the other committees, thus making the work more definite and uniform.

Third, that copies of the proceedings of this meeting be widely distributed, and that they include, as in the past, the constitution and by-laws, thereby disseminating the knowledge of the objects and aims of this Section.

I deeply appreciate the honor shown in making me President of the Women's Section. I wish to thank every one who has contributed in any way toward the success of this meeting. To the chairmen and members of the different committees, but especially to the chairman of the Executive Committee, Miss Cooper, who has had the arranging of the program, much credit is due. To our Secretary who has been patient, hard-working and selfless, I extend my sincere thanks.

The interests of the Women's Section will always be near my heart and I will be ever ready to do even more than my share in the promotion of its interests.

Let us be hopeful, cheerful, and ambitious to welcome every movement for the furtherance of this organization. May we all view the wide horizon that was seen by the noble women from whose inception this organization grew. Let us work unitedly, each doing willingly the duty assigned, and soon the American Pharmaceutical Association, which stands for all that is ethical, scientific and professional in pharmacy, will realize that this Women's Section was needful to make the greater organization a perfect whole.

"We will reach out to pastures new, where the soul feeds,
Reach out and up, God knows the spirit's needs—Keep Growing."

THE CHAIRMAN: Ladies, you have heard this very interesting and instructive address. What will you do with it?

MRS. KENASTON: Madam President, I move that the presiding officer appoint a committee to consider the address.

(This motion was duly seconded and carried.)

THE CHAIRMAN: I will appoint Mrs. Rusby, Mrs. Eberle, and Mrs. Fine on this committee.

(The President resumes the chair.)

THE PRESIDENT: We will now have the report of the Executive Committee, Miss Cooper, chairman.

MISS COOPER: Madam President, before taking up my report there are greetings here that should be read: "To the Women's Section, American Pharmaceutical Association: Sincere greetings and good wishes from the Women's Organization National Association Retail Druggists, Nellie Florence Lee, Secretary."

Another: "With a knowledge of the great benefits to be derived from participation in the meetings of the A. Ph. A. and the memory of pleasant associates still fresh in our minds we feel it is our great misfortune that the width of the continent prevents our being with you to-day. While we are wishing for you in the East a happy and successful meeting, we in the West will patiently await the publication of your valued papers and the report of your good times. Hearty greetings from the Women's Pharmaceutical Association of the Pacific Coast, Ethel E. Nelson, President."

(Miss Cooper reads written report of the Executive Committee.)

Chalfonte, Atlantic City, N. J.

The report of the Executive Committee can be only a matter of formality. The members have not been idle but what has been done does not lend itself to comment.

There might be a statement of the number of letters written and the much smaller number of replies. Something could be said about the requests for contributions to the program and the lack of response. However, not one of you is in the least concerned about either of those details. The Committee realizes that it is expected in common parlance to deliver the goods and that excuses or explanations have no interest for you. Therefore, there shall be none.

No special work has been brought to the attention of the Committee during the year and effort has centered around the program.

The Committee desires to express its appreciation of the very great help that has come from officers and members and to thank particularly those who consented to have a part in the program.

Respectfully submitted,
CLARISSA M. ROEHR,
ADELAIDE GODDING,
ZADA M. COOPER, *Chairman.*

THE PRESIDENT: Is there a motion? What will you do with the report?

MRS. WHELPLY: I move it be accepted.

MRS. GODDING: I second the motion.

(Motion put before the house and carried.)

THE PRESIDENT: We will now have the paper, "Our Wives—Neutrals," by Mr. J. Leyden White. (Read by Miss Cooper, Mr. White not being in attendance at the meeting.)

OUR WIVES—NEUTRALS.

BY J. LEYDEN WHITE.

Although "Coöperation" has been given as the title for not only one, but many of the most prominent topics of discussion during recent years, it has, at the best, generally been restricted

to either side of an imaginary and yet none the less obstructive line of human division. That is the line of mental selfishness and prejudice which we run between the words "Producer" and "Consumer."

As a matter of fact, every civilized human being except the absolutely mentally or physically helpless, is both producer and consumer, for every individual, even in the highest professions, has some connection with some substance of consumption prior to the actual consumption, while, of course, every living thing consumes. However, man has been in the past almost exclusively in charge of the direct actions of production, and although this relation is now rapidly changing in actions through the coming of women into the business and professional fields, it will be many generations before the mental contrasts of the sexes will disappear; for many generations yet man will be controlled by what I make bold to call the *narrow* environments of business, while woman will still have the mental freedom of the almost unlimited field of the home.

What is my reason for callng woman's field "unlimited" and man's "narrow?" This! With the exception of a small part of objects for his personal consumption; chiefly his luxuries rather than his necessities, man buys only to sell again. Even in books for his professional advancement; even in the payments for professional instruction, he is but buying to sell again. Woman buys to use; to consume.

Basing their calculations upon statistics gathered by eminent economists, such generous authorities as Mrs. Julian Heath, president of the National Housewives League and Mrs. Christine Frederick associate editor of the *Ladies' Home Journal* and other prominent publications, state that American women spend between eighty and ninety percent of all money invested in things for use. It is estimated that even in man's peculiar needfuls, such as outer clothing and hats, women spend more than sixty-five percent of the total, while, on the reverse, what man spends for his wife's apparel generally amounts to about thirty cents—and looks like it.

On the other hand, while the responsibility of man greatly lessens, if it does not cease, when he has earned money to spend, woman realizes the burden of earning through the almost invariable limitation of what she has to spend. In the drug business the majority of wives have had only a door, or at most but a few feet separating home and business, and thus have felt the dual responsibility of earning and spending as few classes of women have.

While it is true that some women talk "kitchen" just as narrowly as a great many men talk "shop," the very fact that the life of woman is so much less confined than that of man; that she has so much more of the stimulation of child association than man has, makes her social life broader and her economic calculation less complicated and clearer than that of man. Man spends with calculation largely restricted to what the results of expenditure will be upon a little drawer in one cash register. Woman spends with thought of the appearance, health, education, morals, housing, pleasures and every other factor in the lives of each and all of her loved ones, not only when they may be at home, but everywhere. For the love of woman spans the world and encompasses the universe of thought!

Thus it comes, as I have found by more than one personal experience, that woman far more easily grasps the significance of the fact that "producer" and "consumer" are merely terms to be applied to distinguish between classes of mental and physical efforts of the same man, woman, or even child.

Without detail of expression it must here be clear that coöperation to be really effective; that, in fact anything really deserving the name of coöperation must simply, clearly acknowledge this duality of the individual and rise superior to the restrictions of any commercial or professional class. As a matter of actual fact, the very best rule by which to calculate costs, overhead charges and profits is the Golden Rule. And the druggist, the grocer, the clothier will all see it and use it when they realize that it is a rule that covers them all, because all are both producer and consumer under it.

But man still is commonly in need of a guide to lead him into this path of true coöperation —and he never will find it until woman in her clearer thought, thought drawn from her broader economic experiences, shall bravely make plain her true position of neutrality, and with the courage of her experience show that so-called coöperation which endeavors to eliminate a practice from the drug business by branding it as evil, while encouraging it in the grocery business by branding it as a virtue, will never lead any place that is worth going to.

To make the bald statement that the way to stop selling at cut prices is to stop buying at

them, may bring down upon my head much of ridicule or even something verbally more pungent. Yet, as a matter of fact, in the Stevens bill campaign and all similar work we are asking the lawmakers to *compel* us to stop *buying* at cut prices.

Now, isn't that a rather ridiculous mental condition for the business men of a nation to place themselves in?

What are we trying to do is to change the Golden Rule into a Golden Law. We are saying to Congress and legislatures: "Please *compel* me to do unto others as I would that they should do unto me."

I am not suggesting that any legislative effort should be lessened. On the contrary I advise that all effort be many times doubled. But we know that truly just legislation never comes except at the demand of the general public. No legislative, no public measure of any sort is right, none deserves enactment unless it conforms with public policy, unless it meets with the intelligent sanction of the producer-consumer public. To-day there is much in the trade journals and the general press of the necessity of "educating" the public to the point of approving the Stephens bill and other measures. And the mental, yea the spoken attitude of the educators is practically that we say to our customers: "Please ask your congressman to *force* me to stop buying at cut rates from your husbands so that I shall not be *forced* to sell at cut rates to you."

You women of the A. Ph. A. with your sisters among all intelligent womankind are the great army of true neutrals throughout all the economic world. Some of the performances of us men folks must remind you of this war in which great nations are stirred to their very roots every time ten yards of trench changes hands—and the next day changes back again.

If ridicule will breed consistency, then ridicule us a little. But there are other and better ways in which your great power can be used to set the race right. Beside yourselves there is another great body of neutrals. It is the body dearer to you, to us, than is any other body on earth. That body is under your control; it marches whither you will and speaks the words you teach. By its aid you can bring us into the true fraternity, into real coöperation. Teach us that whatever hurts the grocers' babies hurts our babies—or grandbabies—and things will be much brighter in this funny little old world!

THE PRESIDENT: Is there any new business? If there is no new business we will have the piano solo, "Gondoliers, Nevin," by Miss Martin.

(Miss Martin then rendered a delightful piano solo.)

THE PRESIDENT: The second session will be held next Thursday at two o'clock in this room. We will now stand adjourned.

SECOND SESSION.

The second session of the Women's Section was called to order by the President, Mrs. G. D. Timmons, at the Hotel Chalfonte, September 7, 1916, at 2.30 o'clock P.M.

THE PRESIDENT: We will again have the pleasure of listening to Miss Martin, who will give a vocal solo, "Amulets, Rogers."

(Vocal solo was rendered by Miss Martin.)

THE PRESIDENT: It is necessary to have the report of the Committee on Resolutions at this time, Mrs. Ruddiman.

Chalfonte, Atlantic City, N. J.

The Committee on Resolutions wish to submit the following for your consideration:

We would express cordial appreciation for the greetings sent by the Women's Pharmaceutical Association of the Pacific Coast and the Women's Organization National Association of Retail Druggists.

We wish to thank the ladies of the New Jersey Pharmaceutical Association and the local committee for their cordial welcome and the delightful entertainment given us. We also wish to thank those whose sweet music and instructive papers and talks have made our program one of the best we have ever had.

We wish to express to the President, Mrs. G. D. Timmons, to the chairman of the Execu-

tive Committee, Miss Cooper, and to all other officers, our appreciation of their efficient service during the past year. We especially wish to thank Miss Anna Bagley for her continuous and effective work as secretary during the life of this Section and we regret very much that she can no longer serve us in that capacity.

And finally we wish to express the deep sense of loss and sorrow which this Section feels in the death of Mrs. W. B. Day and Miss Alice Henkel. Their helpful service and kindly friendship will be missed in the deliberations of the Section. We hereby tender our sincere sympathy to their bereaved friends.

(Signed) MRS. E. A. RUDDIMAN,
MRS. HAMPTON RAY KENASTON,
MRS. C. H. LAWALL,
MRS. F. M. APPLE,
MRS. J. C. PEACOCK.

MRS. RUDDIMAN: Madam Chairman, I would move the adoption of these resolutions.

MRS. KENASTON: I second the motion.

(This motion was carried.)

THE PRESIDENT: We will have greetings.

MISS COOPER: I have here greetings from Mrs. Fletcher Howard: "To the Women's Section of the American Pharmaceutical Association. I bring greetings from God's country and in fancy please imagine me present listening and profiting by your wise discussions. I trust the Women's Section is growing in strength and numbers. I hope to meet you next year in Maine."

LETTER FROM THE HONORARY PRESIDENT

New Orleans, August 30, 1916.

To the Members of the Women's Section of the A. Ph. A. in Convention Assembled:

DEAR FRIENDS:

It is with the greatest regret that I am not able to be with you at this meeting. I sincerely thank you for the honor you conferred upon me at your last meeting, by making me the Honorary President of the Women's Section—it was my earnest desire to meet with you this year, and express my appreciation in person, but, the pleasure is denied me, therefore, will do the next best thing and attempt to express my appreciation in writing. I long for the "pen of a ready writer," so I could make you fully understand how much I thank you for the honor.

I hope this meeting will be the most successful you have ever had, and all the benefits you hope to do the profession will be fully realized.

With cordial greetings to all,

Sincerely yours,
(MRS. F. C.) ELIZABETH ARNY GODBOLD.

THE PRESIDENT: The Committee on Nominations will please report, Mrs. Godding.

MRS. GODDING: The Nominating Committee reports as follows: For *President*, Mrs. E. A. Ruddiman, of Nashville, Tennessee.

Honorary President, Mrs. John F. Hancock, of Baltimore, Maryland.

First Vice President, Mrs. E. G. Fine, of Boulder, Colorado.

Second Vice President, Mrs. G. M. Beringer, of Camden, N. J.

Third Vice President, Mrs. Fletcher Howard, of Los Angeles, California.

Secretary, Mrs. Jean McKee Kenaston, of Bonesteel, South Dakota.

Treasurer, Mrs. Franklin Apple, of Philadelphia.

Historian, Miss Bertha Ott, of Cincinnati, Ohio.

Chairman of the Executive Committee, Mrs. G. D. Timmons, of Valparaiso, Indiana.

Chairman of the Membership Committee, Miss Anna G. Bagley, of Columbus, Ohio.

Submitted by the Nominating Committee: Mrs. Adelaide M. Godding, Chairman; Mrs. H. M. Whelpley, Mrs. Charles Holzhauer, Miss Zada M. Cooper and Mrs. C. Dye.

THE PRESIDENT: What will you do with this report?

MISS BARNHILL: I move that we make the election unanimous.

(This motion was seconded by Mrs. Holzhauer, and carried.)

THE PRESIDENT: We will now have the report of the Secretary. She is not present, but Mrs. Whelpley will read the report.

REPORT OF THE SECRETARY.

Your Secretary much regrets that press of business has prevented a more efficient discharge of her duties during the past year.

At the San Francisco meeting your Secretary was instructed to send out a card advising the women of the families of A. Ph. A. members that they are members of the Women's Section. While the Secretary realizes that many women do not as yet understand that they automatically become members of this Section when their men folks join the A. Ph. A., and that it would stir up a lot of interest to send out the proposed card, for lack of funds this instruction was not carried out. Our appropriation in the A. Ph. A. budget last year was but for $25.00. Using only one cent postage, it would have required about $30.00 to mail out the cards and about $15.00 additional to print the cards and address them. Added to this was the uncertainty of whether or not the members possessed a wife in the "present tense." After considerable study of the problem as to how best to reach and interest all the women that should be interested in our Section, your Secretary believes it can only be done through the district-and-state plan adopted for the work of the Membership Committee. A general supervisory chairman in each district directing the work of state chairmen who would be more likely to have personal knowledge of the prospects in her individual state, would apply to all classes and divisions of our work. With such a unit plan of organization we should be able to reach every prospect in the country.

Another suggestion which the Secretary was directed to work out was that Boards of Pharmacy grant a temporary license to women pharmacists from other states who wish to exchange positions for educational purposes without sacrificing their positions. This too, is a fine suggestion, but evidently the fact has been overlooked that a state board of pharmacy is not free to make arbitrary rulings concerning who may or may not practice within the state, but is bound by its state laws. In no case with which I am familiar would the law permit such an arrangement. If a reciprocal registration could be arranged between any two states, then by the payment of the fee, the law would be satisfied and an exchange of positions would rest entirely with the employing proprietors concerned. Discussion of this subject might discover a way in which the benefits of such an interchange of positions would be made possible.

During the present year we have secured nine memberships, from which the Section will receive $1 each as commission. I hope the question of funds for our treasury will be freely discussed and some practical method for raising funds arrived at at this meeting.

The work devolving on the Secretary is entirely too great for one person to take care of and I would suggest that instead of referring different matters to the Secretary to dispose of, that a committee be appointed to take care of each matter which requires any continued attention. These committees would form a corps of assistant secretaries and they could report to the Secretary or not as the meeting sees fit to order. In addition to relieving the Secretary of some arduous duties, this plan would interest a larger number of women, no one of whom would be burdened and each one would know definitely what was expected of her. For instance, let the chair appoint:

A committee of one to write a letter welcoming all new women members to the A. Ph. A. and the Women's Section. A letter could also be sent to the newly elected men members advising them that the women of their families were thereby made members of the Women's Section.

A committee of one to correspond with the secretaries of State Boards of Pharmacy to secure the names and addresses of any women applicants to the board and any other matters they might be able to supply which would be useful to us.

A committee of one to correspond with the secretaries of State Associations regarding any women pharmacists in the organization or of which they may have personal knowledge in the state, and any unfavorable conditions existing in the trade which we might be interested in.

A committee of one to correspond with deans of colleges of pharmacy regarding alumni and present students.

A committee of one to correspond with the State Educational Departments in an effort to bring some knowledge of pharmacy to the high school students during their junior and senior years so that they would consider pharmacy along with other lines when choosing a vocation.

The information gained by all this correspondence would be valuable for the membership committee in its campaign. The list of committees could be increased as the need arises.

Our one great aim should be to advance the interests of A. Ph. A. at the same time we are helping the individual and this constant correspondence throughout the country will be a great advertisement for the parent organization.

A committee of one should also be appointed to prepare the report of the meeting for publication. Last year some of our women complained that their communications were published without their knowledge and that had they known they would have been printed, they would have modified them. The A. Ph. A. and other journals would, I believe, prefer a "story" form for our report both from the point of interest and brevity. Papers, of course, should not be abridged unless by the author.

Your Secretary is sorry to miss the meeting this year, but it is unavoidable, and she wishes for you a very successful convention and a happy reunion with A. Ph. A. friends.

ANNA G. BAGLEY, *Secretary.*

THE PRESIDENT: What will you do with the report of the Secretary?

MISS COOPER: The Secretary makes a number of recommendations. If we accept it as a whole we are adopting them. Do you mean to adopt her recommendations, every one of them, or would it be better to adopt those one at a time?

MRS. GODDING: I would move we would divide the report and accept the regular report and take the recommendations later.

MISS BARNHILL: I second the motion.

(Motion put before the Section and carried.)

MRS. GODDING: Madam President, before we vote on these recommendations, could we ask the incoming secretary what would be her pleasure about this work? I know that the past secretary has been so occupied with her position that she has found it very difficult to do the work that she wished to do, and in that way perhaps she has thought it would be good to pass it on to others to assist. I am sure that the incoming secretary may be a very busy woman, I am quite sure of it, but I think we should ask her.

THE PRESIDENT: May we hear from you, Mrs. Kenaston?

MRS. KENASTON: Madam President, it is rather difficult for one inexperienced in the work to know just what this would represent; the amount of work that would fall to the secretary of this body. It comes to my mind that the secretary should be in touch with almost all the dealings of the section, and we might reach a conclusion better, if anyone is present whose husband is secretary of one of the other sections she might be able to tell us what the usual custom is and then we might follow that custom, because the rule is, that those things are worked out upon a basis of the best service as a whole. While I realize that I am very busy, it would be a great pleasure to serve to the best of my ability that which would further the best interests of this section, and if it is the duty of the secretary to assume this work, place that duty upon your new secretary. If the section would be better served by different committees, then adopt the plan of having the different committees.

THE PRESIDENT: The idea was to distribute the work, Mrs. Kenaston, and relieve the secretary somewhat, but if you are willing to do the work I am sure that we would be glad to have it that way.

MRS. KENASTON: In the distribution of the work greater service results, that is true, and I am not in a position to know which would give the most effective results to the Women's Section. The one thought which I believe prevails in the minds of all who have sufficient interest to come and be present at this meeting is that the women of the United States so inspire advancement in the profession of pharmacy that the younger generation may take up this work, one of the most effective means of a livelihood open to womanhood.

MISS COOPER: The recommendation that Miss Bagley has made is, that this committee of one correspond with the secretaries of the Boards to get the names of the women applicants for registration. You see those names are not available until reports come out except by collecting them here and there, as they are published in journals, and her idea seems to be to get those names from the secretaries of the Boards. It would mean a few letters, perhaps one apiece during the year to each secretary of the Board in each state, and then those results would later have to be turned over to the Secretary. That is what it would amount to.

MRS. RUDDIMAN: May I make a suggestion? Would it be any better, instead of having a committee of one appointed for so many different things, that is, several different committees appointed, would it be any better to let the incoming secretary keep all of this work in her own hands, having the President to appoint an assistant for her, for this year, then if she finds that she can not do all of this corresponding she simply would write to her assistant and ask her to send out letters of various kinds? Would that be any better than having so many different ones?

MISS COOPER: Madam President, I like that idea. It seems to me that the new secretary might carry out these suggestions of Miss Bagley's by asking various people to help her if she felt the need of it. Any member that has had more experience would be glad to do that, and still that would be carrying out Miss Bagley's ideas which are good, but not have a separate and distinct committee which would mean so many committees to report another year. I will make that a motion. I move that it be left to the incoming secretary to choose her helpers to carry out the recommendations made by the former secretary.

MISS BARNHILL: I second that motion.

(Motion put before the Section and carried.)

THE PRESIDENT: We will make a little innovation and have the installation of officers at this time, as our President has to leave. Will you come forward, Mrs. Andrews, and install the new officers and extend them a hand of greeting and congratulation.

MRS. ANDREWS: Madam President and ladies: I wish to introduce Mrs. E. A. Ruddiman as your incoming president.

MRS. RUDDIMAN: Ladies, I thank you very much for this compliment which you have paid me. I think that you could have done much better in choosing someone else, but I will take the office and try to do the best I can with your assistance.

MRS. ANDREWS: Madam President and ladies, Mrs. E. G. Fine, of Boulder, Colorado, your first vice-president.

MRS. FINE: Ladies, I feel very much honored that you have given me this office, a perfect stranger among you. This, I think, is the second meeting that I have attended, and at the first one I was so very busy that I had not the pleasure of meeting any of you. I thank you.

MRS. ANDREWS: Mrs. Jean McKee Kenaston, of Bonesteel, South Dakota, Madam President and ladies, your secretary.

MRS. KENASTON: Madam President, other officers and members of the Women's Section of the American Pharmaceutical Association: As a representative of the State Pharmaceutical Association of South Dakota and also of the Ladies Auxiliary of South Dakota, I wish to express the appreciation which I am sure these organizations will feel when they learn of the action of this distinguished body. In representing the Women's Auxiliary of the Pharmaceutical Association of South Dakota I appear before you as sweet sixteen, and while I am just the age of the young woman who is seeking a sweetheart, I have found a number of sweethearts in this room, and while only sixteen I still have the distinguished honor of being the motherof the Women's Organizations in connection with the Pharmaceutical Association, the Pharmaceutical Association of South Dakota having formed the first organization for women when its Ladies Auxiliary was organized. Personally I wish to thank you for this recognition of the South Dakota people, and I am glad to carry back to them this distinguished position which this body has been pleased to confer upon me. I thank you.

MRS. ANDREWS: Madam President and ladies, Mrs. F. M. Apple, of Philadelphia, your treasurer for this year.

MRS. APPLE: Madam President and fellow members, I thank you for the honor and I will endeavor to take good care of all the cash.

THE PRESIDENT: We will now listen to the report of the Membership Committee. Miss Cooper will give that report.

MISS COOPER: Madam President, this is only a partial report. Other reports perhaps are in the mail. This is from Mrs. Gray.

REPORT OF CHAIRMAN OF MEMBERSHIP COMMITTEE OF DISTRICT NO. "7."

I was duly notified of my appointment as chairman of membership committee of District No. "7," comprising the states of Illinois, Wisconsin, Missouri, Iowa and Minnesota with the instruction of the secretary that I was to appoint a chairman in each state to act as a sub-committee to secure women members for the Women's Section of the A. Ph. A.

I very soon entered upon my work by asking Miss Zada M. Cooper, of Iowa, to canvass Iowa —and this she very kindly consented to do.

Mrs. Minnie M. Whitney was selected to take care of Missouri. She was very willing to be of assistance—and reports that she had sent out about fifteen personal letters to women pharmacists in an effort to secure members before the annual meeting.

Miss Mary L. Creighton, of Urbana, Ill., kindly consented to send letters and literature to about 100 registered women pharmacists in Illinois.

Owing to some little delay in securing the necessary stationery she was unable to send out these letters early enough to get results before the annual meeting.

Wisconsin was thoroughly canvassed in 1915.

Not knowing any one in Minnesota to appoint as sub-committee I attended to put my effort in there, but was unable to get very much accomplished.

Have mailed out a number of personal letters to friends and acquaintances of mine, and have one prospective member.

Since the last Annual Meeting, I have compiled a list of 200 names and addresses of women pharmacists, which is to be sent to the Secretary for her files.

Respectfully submitted,

M. M. GRAY, *Chairman District No. "7."*

THE PRESIDENT: What will you do with this report?

MRS. WHELPLEY: I move that it be accepted.

MISS COOPER: I second the motion.

(Motion was put before the Section and carried.)

THE PRESIDENT: We will now have the report of the Committee on President's Address, Mrs. Fine.

REPORT OF THE COMMITTEE ON THE PRESIDENT'S ADDRESS.

Hotel Strand, Atlantic City.

MADAM PRESIDENT:

We, your Committee on the President's Address, after careful consideration unanimously recommend that the address be accepted and that the recommendations therein be adopted.

Respectfully submitted,

(Signed) MARY F. FINE,
ISABEL EBERLE,
MARGARETTA S. RUSBY,
Committee.

MRS. FINE: I move you, Madam President, that this report be accepted and the committee discharged.

(This motion was seconded by Miss Cooper, put before the Section and carried.)

THE PRESIDENT: We will now listen to the paper, "Pharmacy—a Desirable Profession for Women," by Mrs. Hampton Ray Kenaston.

MRS. KENASTON: Madam President, I trust that my hearers will regard the few thoughts that shall be presented as a prelude to a discussion that may follow along this line.

PHARMACY—A DESIRABLE PROFESSION FOR WOMEN.

BY MRS. HAMPTON RAY KENASTON.

One of the objects of the Women's Section of the A. Ph. A., as defined by the Constitution, is to emphasize the right and capability of women to engage in all pharmaceutical pursuits.

This is an epoch-making period when woman's right to enter the various fields of education, the professional and commercial occupations, is conceded as proper and she is now welcomed into almost every phase of human activity. Though she is greatest as queen of the home, if she elects to enter the various pursuits demanding greater activity and more intricate mental achievements, she has established her power to make a personal success and also to elevate the plane of all occupations and professions, graced by her presence, by giving a service of worth and courteous business methods that surround her business life with an attractive personality that insures success.

It is not possible to make the greatest success of life unless a definite conception of what we are living for is ever present in our plans. Duty, courage, self-discipline—these are the laws that make a useful woman. Either one without the others is incomplete. A woman who knows her duty but has not the courage to do it, is a failure; equally, if she have not the discipline of mind and heart and hand to do it effectively.

According to the Divine plan, time is the only gift that is distributed equally to all mankind. The Queen, as she rules her thousands of willing subjects and directs the destiny of a nation, does not have one more moment of time in a day, a week, or a year than is given to you or to

me. The usefulness and ability of the individual in their life work is the accumulated results of the manner in which this equal gift has been used.

Time, or as we may more properly term it, life, is our most precious gift and we owe to the world the most intense actvity of which we, as individuals, are capable and thus do our utmost to pay the enormous debt we owe for this wonderful gift. We cannot afford not to improve every single day of our time to the advancement of the best interests of our community morally, socially and commercially.

The law of compensation requires that we select a given line of effort that efficiency may be attained and what can be more desirable than to establish equality and ability as man's equal and study to enter one of the professions. Divine teachers, philosophers and poets have recognized this law of equality. As we stand on the threshold of the twentieth century when the light is dawning and women are receiving the recognition they merit, the importance of selecting a profession is brought before the young women, and to them we must offer our assistance and as representatives of one of the very best professions for women, emphasize the merits of pharmacy as their life work.

It is an accepted fact that, when woman entered the profession she elevated it and created a new scope, breadth and magnitude by her achievements in pharmacy, both as a practitioner and as a teacher.

If we review the general field of pharmacy or any of the departments into which it has been divided, we are impressed with the fact that our knowledge of drugs and their uses, with all their complexities of manufacture and dispensing, has been enormously increased. By the assistance of the allied sciences, aided by the improved methods of drug plant culture, chemical manufactures and animal products; the physiological testing of the products, new facts have been discovered and many of Nature's important and well-guarded secrets have been brought forward for our enlightenment and benefit. The physicians have put to test the new remedies evolved and their application in practice has been followed by the most wonderful and brilliant successes in the annals of medicine.

Pharmacy has undergone a pronounced revolution within the present generation and to-day it is taking high rank as a scientific profession. The character of the duties properly belonging to the pharmacist are especially adapted to the work women are capable of performing with the most perfect deftness and accuracy.

A pharmacist is one who is skilled in the art of identifying, preparing, preserving, testing and dispensing medicinal substances. A physician is versed in the treatment of diseases by therapeutic methods. The physician prescribes the remedy to be used, but the pharmacist prepares and dispenses the same. To properly prepare all medicinal substances in such a manner that their use as remedial agents shall produce the desired results, requires a high degree of skill involving knowledge of the medicinal substances to be used and manual dexterity in execution. The most important factor in acquiring skill in the practice of pharmacy is the acquisition of technical knowledge through study, observation and training.

A pharmacist should be known to the medical profession and to the public, as a good chemical analyst, a thorough botanist, a pharmacognosist, and above all a skilled compounder of official pharmaceutical preparations. All these duties women are peculiarly fitted to perform strengthened by their aesthetic tastes, tenacity of purpose and determination to win.

At the prescription counter and at the sales counter woman has succeeded equally with man. She will dispense a life time of loving and efficient service to humanity, for with pharmacy as her choice, it soon becomes her shrine. She will give an air of welcome and cordial greeting to her customers; an atmosphere of competency and cheerful service in whatever department duty may call her; accurate and dependable as a compounder and faithful as a student after leaving the college from which she receives her training.

Women should be encouraged to enter the profession of pharmacy. In every country and in every state of civilization, ancient and modern, history records incidents of women engaged in the preparation and administration of medicines. It further reveals the very interesting fact that women were permitted to practice in Egypt as early as the eleventh century before Christ. The oldest hospital for women known to exist is in Bangkok, Siam and there women dispensed the medicinal substances. For many years women physicians have been common among the hospitals established by the government of Mexico, but it remains for our American women to

establish the truly professional and college educated woman pharmacist and also to give her position such prominence and recognition that the daughters from our best American families may be willing to enter the colleges of pharmacy and complete the course of study.

It is an accepted fact that the possession of the registered pharmacist's certificate does not insure pharmaceutical excellence. To be a highly satisfactory prescriptionist, one must have education, a well equipped laboratory, surroundings in harmony with the dignity of the profession and a personal interest and professional pleasure and pride in prescription work. Since all men who engage in pharmacy are not successful, it must follow that all women selecting this profession may not be successful.

The points of excellence to be attained by the women who are actively engaged in the practice of pharmacy are many and varied. She must be self-reliant. Within ourselves lies the power to be what we will to be and learned men agree that self-reliance is the greatest factor in the success of the individual and the success of the individual in the profession becomes that of the profession as a whole. Growth and progress are established and maintained by the constant practice of the inherent powers. Let the industries be well directed as wisely executed industry brings material commercial success and a justified pleasure in this true and noble calling in behalf of humanity, for which women are adapted.

The accuracy and deftness of woman's hand combined with clearness of eye and brain, and a wise and judicious employment of moments, hours, days and years must be fruitful. Though industry is a prime virtue, we surrender our claims to wisdom if we carry industry to the point of drudgery. Since her purpose is wise and just, the woman pharmacist will pursue her work to the end and resolve to win for herself the fortune to which she has aspired. Continuity of application to her prescription counter and a desire to give perfect satisfaction to her customers makes failure improbable. To have the privileges accorded to her, of practicing her chosen profession, creates in her a desire to become efficient in every department of the store.

From the human heart within comes good feeling, gratefulness and happiness and the maternal instinct to administer to the comfort and health of those who have solicited her professional skill. The scientific skill necessarily displayed in compounding a prescription brings a thrill of professional pride each time a package is sent upon its mission of relief to the suffering.

The successful pharmacist is diplomatic and possessed of a tactfulness that brings harmony in all business and professional relations; diplomacy with a sagacious cleverness in dealing with her customers that will adjust differences and win by peaceful means.

Energy gives emphasis to purpose and the woman who enters the profession must cultivate the inherent power of vigor, strength, business and professional activity. If we allow our energy to become dormant—latent—we are wasteful and foolishly extravagant, and the woman who has the privilege of practicing her chosen art will be ready at all times to perform the duties of any one of the varied departments of the modern pharmacy.

The result of thoroughness in the knowledge and duties of the various departments of the business is perfection. Be accurate in the balances at the prescription counter, in your statements of qualities in goods and sizes and amounts; your method of handling goods and in placing orders for same and selling them, remembering that accuracy, thoroughness and methodical administration creates prosperity and facilitates wise economy.

In the conduct of business, women constantly exercise a prudent and conservative management. Women are naturally economical and this quality especially fits them for the management of the average drug store. Economy does not mean to undergo privations and to save and hoard money; that is retarding business progress. The best economy is wise management, judicious buying and competent directing of the employes and general business of the pharmacy. Economy by the pharmacist increases money by investing it profitably, and demands a fair return incurring no needless waste; and demands that both the employer and the employed utilize their every business moment by profitable industry and by so doing save, that more money may be produced.

Owing to the peculiar relationship existing between the public and the pharmacist, it is essential that those in the profession be courteous, respectful, obliging, and dignified at work. These qualities usually predominate in women who aspire to enter the profession and those who possess them will find the open door to a successful career as a pharmacist.

The young woman about to select her vocation for life should be encouraged to enter the profession of pharmacy. She is endowed with the faculties that are capable of creating for her

a place requiring the superior qualities of character—thoroughness, refinement, methodical and economical business methods, scientific knowledge and accuracy in dispensing, cleanliness, and above all her aim to be a true woman—there is scarcely any limit to her possibilities for advancement and achievement.

Labor on then, my fellow pharmacists. Ours is a noble work, a glorious profession—one worthy of our best endeavors. Seek to make it a shining light among the professions, dispersing the darkness and illuminating all mankind with the true spirit of effort. Strive to make our professional duties a living force, permeating our social and business life with the grand principles of industry, economy, honesty, refinement, and scientific advancement. Thus it will be a real power for good in the world, for as we wield the pestle, we should be contributing in body, soul and spirit, to the upbuilding of one of the most desirable professions for women, and ennoble and advance the work of the pharmacist so that the young women who follow us may have the inheritance of our duties well done.

THE PRESIDENT: Mrs. Kenaston, does it meet with your approval to defer the discussion of your paper until later?

MRS. KENASTON: Certainly.

THE PRESIDENT: We have with us Dr. John Uri Lloyd, of Cincinnati, with whom you are all acquainted, and one whom the American Pharmaceutical Association delights to honor. He will give us a talk.

J. U. LLOYD: Ladies of the Women's Section of the American Pharmaceutical Association, I listened to the paper but I didn't hear it all, but it gave me some text to use. Now listen, young people, the first word that I caught when I came into the room, and I am sure the young lady looked at me when she used that word. She used the word "time" and then she was looking at me thinking about how much time some people had spent in the world, and then I was wondering whether I could take that as a text, and utilize a part of my time at this informal talk in relationship to the word time.

Now what do we mean by time? Did you ever think of that? I remember reading in my mother's album a phrase written by my father when he was a young man and mother was a young woman, in those Colonial days, and this was the phrase—I have never forgotten it:

"Circles are prized not as they abound
In largeness but the exactly round.
So life we prize that doth excel
Not in much time but the living well."

Now did you ever think about that? Why some of the greatest works that have been accomplished by men and women in this world have been accomplished by those who had not much time, as years are counted, but accomplished within a very short period, and made a record that would stand for all time.

But I have asked the question what is time? We count time by day and night and the encircling of the sun by the earth. That is the way we get our time. What does night amount to? Did you ever think, that nearly all of all that is is brightness? Did you ever think that although we have one-half night and one-half day that the people on the surface of the earth are trying to turn night into the day in the universe? Take a ball and hold it before a great light and that ball gives a shadow that disappears at a point, and if you could get away from the earth, I opine, as the astronomers do when they theorize, you would not see the darkness at all. It would be simply a glowing ball, circling through space, and the one-half we call the darkness is simply a shadow close to the earth. And so it is as we go through life, the darkness of life is largely imaginative. If you look upon the brightness and contrast it therewith you find that there is so much light. Once in a while we become despondent, but when we struggle out from under the cloud we find that there is so much brightness that we had no right to be in darkness.

But listen; now what is time as we count time from the moving of the earth through space? What do we mean by time? As I sum it up, time is inexpressibly short. There is no such thing as time that is lengthened out. There is no such thing as time that is not created. There is no such a thing as time that is lost and gone. The living present is the momentary instant that we are here. There is no time to it. All that is past is gone. All that is ahead is uncreated.

How long is this instant of life? How long do we live in the time that is the instant of the passing along of life? As we look back, we look into something that is out of existence, gone. As we look forward, we look at something that is not yet created. All that is behind us has disappeared. All that is before us uncreated, and the instant, now, is it a second, is it a minute? What is the period of time that makes up the instant of the life as we pass along? No one can tell.

But we all live at once. But not in the same way, as no two of us ever saw the same moon, and no two in this room can look out and see the same object. So no two of us can utilize the same time that comes to all alike. The instant that we call time is free to the world and is utilized by the world, but no two of us utilize it alike. I stand here and look at the moon. Another person stands in New York and looks at the moon, and from a different angle we see different moons. By my side the person who looks at the moon sees a different moon from the moon that I am looking at, and the moon that each looks at is the something created, comparatively, in our minds. Ask your friend, whenever you care to try the experiment, when the moon is full and you go out and stand and look at the moon, a bright light, ask your friend how big does that moon seem to you? Ask two or three in a party and you will be surprised at the answer. Some will say big as a dime, others as a dollar, and to others still, it looks to be as large as a cart wheel.

Now why this difference? Why because of the fact that in their own minds they are comparing the moon with something they are thinking about. The man who holds the dime at arm's length will see a much smaller moon than the man who holds the dime close to his eye. The man who looks at the cart wheel, or the woman at the moon and thinks of a cart wheel will compare it with the cart wheel, and the one who looked at the dime in his mind will compare it with the dime, and it is a kind of mental comparison.

So life is largely a question of comparison, and, unfortunately, young people—and now I am coming to the young ladies and the older ladies too,—often you make comparison from the side of darkness, and then comes in envy and jealousy of some other person of whom, if you could know all that they know, you would be very far from being envious and certainly very far from dark.

Seemingly, some have all the brightness in life. Practically, if you could know everything that concerns them, they have the opposite. Give me the home, the Colonial home of the olden time with that spinning wheel that I used to, when I was a boy, see my mother use in the old home. Give me that home with that spinning wheel. Give me the simplicity of that home. Give me the pleasures and treasures that come to those who live in that home, and there are thousands in New England still to-day, and I would say to you, you can take your palaces and go, you may take all these honors that come in the line of the political arena, and all such as that. You may take your great hotels and go. They cannot give you in the way of pleasures what comes from a home like that.

I remember—and it does not seem very far back—don't you understand, young people, how easy it is to remember backward? You can't forget, try as you may, that which came into your life when you were a child. I remember when as a boy down in Kentucky, going barefoot in the by-paths of the woods, attending the little country school, everything as I look back exceedingly primitive, but we were very happy. We didn't know it, but we were happy in contrast with those out in the world, happy in contrast with whoever is to-day in a palace. The cares that come to these people in these positions are something that if they

could evade and get from under they would gladly, but this fashion that catches them, as the fire-flies about the candy, they can't extricate themselves and they suffer and imagine they are happy, and suffer in silence, and some of us envy them.

Get from under such as that. Do not for one moment believe that we who are here now in the primitive conditions of some parts of our country, which is the better condition of the people who live there, do not for one moment believe that when they extricate themselves they become happy. They become the reverse.

Why I am stopping here, because I had to. I tried to get into a little hotel. I seek always, when I go to a city, a small hotel. But they were filled and I had to go to this great palace down here, fifteen hundred rooms, a palace lacking everything that brings comfort and joy, pleasure and happiness, a palace inadequate when it comes to life, living well, a palace that will let you, if you stay here a few days and study the people, formulate some ideas of the people who are here. Now I say to you that I sized up some of them, and I guess they sized me up, but I sized some of them up, and I will tell you I know how some of them are living. They are working the year through economizing, scraping, saving, to come here and spend in a week or two weeks the money the year has put, a few cents at a time, into their pockets.

There are others who have made a pile of money, who are coming here to spend it looking for happiness, but the old man of the sea hangs over them. They can't get it and their money is of no use to them. Their money is a barren idolatry and the home that they are in, is no home. The life they are living is a failure. That is true of another side of those people. Now listen, young people; one of the lessons that I hope what I have said will bring to you,—and I think I have seen enough in going through life to say that this lesson is real—is, to beware of extravagance. The person that spends money beyond his income is miserable. The person who spends money up to his income, not knowing what may come, is miserable. The person who spends more money than he should spend for those things that could be bought cheaply, is doing wrong, and under those circumstances extravagance is the bane of society to-day, and by society I do not mean those who live in palaces alone. I commence at the bottom, if there be a bottom. I commence there and say the great trouble with the American people to-day, the great weight that is bringing the lines on their faces and the care on their brow, is due to extravagance, jealousy, and envy.

Those in the simple life are happy. Now listen, the simple life and the pleasant home must be made by the woman. The woman is the one who can do this, if she doesn't evade an opportunity. The woman who has the opportunity of making a home, even though it be of two rooms, like I remember down in Kentucky, can be a good one, and all about her life, brightness and happiness. But she who says nothing pleasant to anybody, does nothing to help anybody and cares nothing for the home, is in and is out in society night and day, and going to the great hotels and watering places of the North in the summer, and others in the winter in the South, she is the one that is setting the example that so many others follow to their destruction.

I thank you for giving me the opportunity of bringing to you these informal remarks. I would have made it more scientific from that paper, only I know you did not want science. This is not the place for science. This is the place for life, home, happiness, bright faces, and smiles. That is what you need here and that is what you women need to carry with you everywhere. That is what makes life bright, joyous and happy, and that is really what makes the home. Applause.

MRS. GODDING: Madam President, I would move a rising vote of thanks to Dr. Lloyd for his choice words of wise counsel to the Women's Section.

MRS. KENASTON: I second the motion.

(Motion put before the Section and passed with a unanimous rising vote.)

THE PRESIDENT: Are we ready for the discussion of the paper, "Pharmacy—

a Desirable Profession for Women?" I wish we might have a discussion on this paper. It was very excellent, and I am sure there is room for much discussion. We all enjoyed it, and I wish you would feel free to discuss the paper.

MISS COOPER: What I would say would be all on one side. I can not say anything on the other side of the question, so it would not do for me to discuss it. Being a pharmacist myself I heartily agree with everything that Mrs. Kenaston said.

MRS. GODDING: It is only a particle, but I would say that in the experience of Mr. Godding, he has found that the young women, who come in the store to learn the business, were far superior to many of the young men. For the woman, there are more disadvantages in gaining her experience, and we found that those young women, the few we have employed and given the opportunity for experience, were really ahead of many of the young men in their capabilities and in passing the Board.

THE PRESIDENT: Mrs. Godding, what is your idea about having a woman in every pharmacy?

MRS. GODDING: Why, I believe in it. I believe that it is the splendid opportunity for women. It is not an overcrowded vocation or profession but of course there are a great many obstacles in the way, but those obstacles I think the Women's Section is pledged to do all they can to obviate.

THE PRESIDENT: I mean, Mrs. Godding, from the employer's point of view, can he well afford to get along without a woman in his pharmacy if he has a large pharmacy; is not she almost a necessity?

MRS. GODDING: I think she is, but the pharmacist is not always able to arrange it satisfactorily.

MRS. KENASTON: In furthering the argument relative to young women taking up the profession of pharmacy, it might be well to mention something of the comparative salary that could be expected. In the central states, the only portion of our country with which I am familiar with salaries, the woman pharmacist commands a salary of from seventy to a hundred dollars, and a few a hundred and five and ten dollars per month. The president of our Board of Pharmacy was present at this meeting but went away, I believe yesterday evening, and he mentioned the fact that in South Dakota each one of the leading stores was making an effort to have at least one registered woman pharmacist in the store, but as to the salaries I did not think of asking him. He mentioned further that in his experience on the Board of Pharmacy that the higher averages and stronger examination papers were handed in from the young women who had taken the examination, hence the argument in favor of salary would be in favor of women.

THE PRESIDENT: Mrs. Bruce Philip, of California, has sent a paper which has failed to arrive. I will, however, read the title: "The Druggist's Wife Before and After?" We are very sorry that this paper did not get to us.

Is there any new or unfinished business? If not, we will have a piano solo, "Poem, MacDowell," by Miss Martin.

(Piano solo was rendered by Miss Martin.)

THE PRESIDENT: This closes our session, and I want to take this opportunity

to again thank everyone who has assisted at these meetings and I hope to meet you all again.

MRS. KENASTON: Madam President, inasmuch as this section has been deprived of the benefit of the paper written by Mrs. Philip, which paper was intended for our benefit, I move you that this Section empower the Secretary, when this paper reaches her, to include it in our printed proceedings, so that we may have the benefit of the paper by perusal.

(This motion was seconded, put before the Section and carried.)

On motion duly made, seconded and carried the meeting then adjourned.

RESULTS OF THE REFERENDUM VOTE ON THE YEAR BOOK.

At the Atlantic City (1916) meeting of the Association, the Committee on Publication stated in its report that there was a division of opinion among the members of the Association regarding the future issuance of the Year Book, and recommended that a statement of the facts of the case be mailed to the membership in November (1916) with the official ballot, and each member be requested to express by vote his or her preference. The recommendation was adopted and the ballots distributed.

The following report is submitted:

"Met Thursday afternoon, December 14, 1916, and canvassed the vote cast on the proposed plans for the Year Book.

The count is as follows:

1—Do you favor the discontinuance of the publication of the annual volume known as the Year Book?

Yes—*235*. No—*398*.

2—Do you favor the continuance of the publication of the Year Book as heretofore and an increase in the annual dues?

Yes—*196*. No—*368*.

3—Do you favor the publication of the Year Book on a subscription basis, the price for the same to be fixed by the Council?

Yes—*283*. No—*276*.

4—Do you favor the issuance of the abstracts, constituting the Report on the Progress of Pharmacy, in the form of installments in the JOURNAL?

Yes—*259*. No—*235*.

5—Do you prefer that these abstracts be published in monthly installments in the JOURNAL?

Yes—*210*. No—*255*.

6—Do you prefer that these abstracts shall be published as quarterly supplements to the JOURNAL?

Yes—*87*. No—*345*.

7—Do you prefer that these abstracts shall be published as semi-annual supplements to the JOURNAL?

Yes—*79*. No—*349*.

Respectfully submitted,

A. D. THORBURN,

(Signed), EDWARD W. STUCKY, FRANCIS E. BIBBINS,

FRANK H. CARTER. *Board of Canvassers.*"

The above vote is not as conclusive as it might be, because some of the members voted on only one query and some on all, and only about 25 percent of the total membership voted. The returns, however, as far as they go, indicate that the voters wish the publication of the Year Book continued as heretofore, and with no increase of annual dues.

With these opinions in mind, the Committee on Publication will continue its endeavors to solve the knotty financial problem with which they are confronted, and entertain the hope that they will be able to report a successful solution at the Indianapolis meeting of the Association.

Respectfully submitted,

J. W. ENGLAND, *Chairman.*

THE HOUSE OF DELEGATES, AMERICAN PHARMACEUTICAL ASSOCIATION

MINUTES FIRST SESSION.

The first session of the House of Delegates of the American Pharmaceutical Association was called to order in Hotel Chalfonte, Atlantic City, September 5, 1916, 4.25 P.M., by Chairman H. P. Hynson.

THE CHAIRMAN: There is, I believe, upon you a very great responsibility in regard to this House of Delegates. If it is to be something somebody must take interest in it and push it forward. If it is to be nothing we ought to decide that it should not exist, and put it out of existence. I have prepared a report which I am willing to read to you, which will be my swan song on the subject, because I have been writing and talking on it for quite a while, and I am not only tired but I think I have worn out the patience of everybody connected with it. If, however, I can impress three or four in this audience with my views, with what I think may be done with the organizations of pharmacists, I shall be very happy to retire. Let me have your attention for a little while.

(Chairman Hynson then read his address, which is printed in full in the September 1916 issue of the JOURNAL, page 948.)

THE CHAIRMAN: The Secretary has been good enough to prepare a paper on "Plans of Organization," which he will now present.

SECRETARY HOSTMANN: The plans of reorganization, as I understand them, affect everything that we may discuss about the House of Delegates. I am sure that everybody, who has given any consideration to the House at all for the past three years, agrees that something must be done with it. I have not confined myself to personal views in this paper, but have tried to get the various points in such shape and form as may be profitably discussed and given thought, by those who wish to do so.

(SECRETARY'S ADDRESS.)

PLANS FOR THE REORGANIZATION OF THE HOUSE OF DELEGATES.

BY JEANNOT HOSTMANN.

Practically ever since the creation of the House of Delegates by resolution of the Council, August 19, 1912 (J. A. PH. A., I, 928), a continual discussion has been carried on concerning its personnel, and the question whether it was or ever could or would be of any value; whether it could or would fulfill any or all of the functions the proposers of the resolution that brought it forth had in mind.

Before taking up any plans for the reorganization of the House we should devote a short time to its history. The following resolution presented by Dr. J. H. Beal at the Denver meeting held in 1912, was adopted by the Council August 19, 1912 (J. A. PH. A., I, 928):

(1) There is hereby created a House of Delegates to have and exercise such functions as are herein or may be hereafter specified by the Council.

(2) Until the membership of the House of Delegates shall be otherwise determined by the Council, it shall consist of such regularly elected or appointed delegates from state and local pharmaceutical societies, colleges and schools of pharmacy and delegates from the National Association of Retail Druggists, National Wholesale Druggists' Association, American Medical Association, National Association of Boards of Pharmacy, Woman's Organization of the National Association of Retail Druggists, National Association of Manufacturers of Pharmaceutical Products, American Chemical Society, Association of National and State Food and Dairy De-

partments, the National Association of Pharmacologists, Pharmacists in Departments of U. S. Government Service, and the A. O. A. C., the credentials of all of whom shall be approved by the Council, and five members of the Council appointed by the Chairman of the Council. The President, President-elect, Treasurer, General Secretary, and the Chairman and Secretary of the Council shall be members *ex-officio*.

(3) The elected or appointed delegates shall hold office for one year, or until the credentials of their successors shall have been approved by the Council. Each society or institution recognized shall be entitled to three delegates, and each delegate shall be entitled to one vote. No delegate shall act as proxy of another delegate not present, nor as delegate for more than one society or institution. Any member of the Association may attend any session of the House of Delegates, and shall have the privilege of the floor.

(4) The House of Delegates shall organize annually by the election of a Chairman, two Vice-Chairmen and a Secretary. For the purpose of such annual organization the first session of the House shall be called to order by the Chairman, one of the Vice-Chairmen or the Secretary of the preceding House, or in the absence of all of them, by the Secretary of the Council.

(5) The House of Delegates shall have authority to adopt all rules and regulations necessary to the proper conduct of its business, and not inconsistent with the Constitution and By-Laws of the Council.

(6) The House of Delegates shall hold at least one session during the annual meeting of the Association, at an hour previously determined by the Council, and such additional sessions as may be necessary for the transaction of its business, but shall make a final report of business transacted to the final session of the out-going Council at each annual meeting.

(7) Until otherwise determined, the House of Delegates shall exercise the following functions:

(*a*) To receive and consider the reports of delegates from the bodies which they represent in the House of Delegates.

(*b*) To consider and report upon such resolutions, and such other subjects as shall be referred to the House of Delegates by the Council or by the Association in General Session.

(*c*) To act as a general committee on resolutions and to report to the Council not later than its last session a series of resolutions upon topics concerning the general welfare of the Association or concerning any features of the Association's work.

(8) Until otherwise provided, the order of business at the first session of the annual meeting of the House of Delegates shall be as follows:

(*a*) Calling the roll of delegates whose credentials have been approved by the Council.

(*b*) The election of Officers.

(*c*) The appointment by the Chair of a sub-committee on resolutions to prepare and put into proper form resolutions for subsequent consideration by the House of Delegates.

(*d*) The reading of communications from the Council or from the Association in general session.

(*e*) Calling the roll of delegations for the reception of reports, resolutions and communications. At all subsequent sessions of each annual meeting the order of business shall be such as the House of Delegates shall determine.

(9) At its first annual meeting the House of Delegates shall consider and report to the Council a body of by-laws and any recommendations it may have to offer concerning the form of organization, method of working, or concerning the scope and character of the functions which should be exercised by the said House of Delegates.

The introduction of the resolution caused spirited discussion as to the powers and functions of the proposed body as well as to possible interference by it with the business of the Council and the General Sessions.

Joseph W. England, in a paper read before the Philadelphia Branch (J. A. PH. A., I, 1287), explains in detail the formation, powers, functions, etc., of the newly created body, with which most of us are now familiar. Some few sentences, I think, might well be repeated at this time.

"It was created by resolution and not by by-law. Its functions are distinctly limited; it may become an important factor in the work of the Association and be given greater powers, or it may fail to meet the needs of the Association and be abolished. * * * * It should be noted that the House of Delegates can exercise only such functions as have been specified, or may

be hereafter specified, by the Council. It can either initiate resolutions, or it can consider and redraft those referred to it by the Association, Sections, or Council. It is in effect, a clearing house to which resolutions can be referred and proposals moulded into shape for consideration by the Council—which still remains the executive body of the Association—and which in turn reports to the general assembly. In this way questions can be fully discussed before the House of Delegates, both by delegates and members, and the business of the Association expedited."

This idea of the House simply serving as a "clearing house" seems up to now to have been the main excuse for its existence.

At the Nashville meeting quite a few resolutions were referred to the House by the General Session and the Sections and after action thereon by the House were referred back to the Council or General Sessions for final action. At the Detroit meeting little of real value was accomplished and still less, if I am informed rightly, at San Francisco.

The "clearing house" idea has been tried out. It has failed. If the House of Delegates is simply to act as a sort of a "sanctified powerless committee on resolutions," then, I think, it ought to be abolished.

If it is to be continued then it should be given entirely different functions, and these latter should be clearly defined. Personally I believe that the House of Delegates should be continued and that it should become the legislative department of the Association—the Council becoming solely executive.

If this plan be adopted, then the other point to be considered is that of representation. Several plans for the reorganization that have been suggested are herewith given in abstract for your consideration and discussion.

First: The plan suggested by our charman to change the basis of representation by limiting same to delegates chosen by State Pharmaceutical Associations—such delegates perforce being members of the A. Ph. A.—has been published in the JOURNAL A. PH. A., IV, 524, and V, 8. Independence from the Council is suggested but the functions appear to remain as at present.

Second: On page 496 of the *Druggists' Circular* for August 1915 we find as follows:

We believe that the organization of the House of Delegates as an important legislative body in the Association is an imperative need, and so far we heartily agree with Dr. Hynson's proposition; but when it comes to the question of the personnel of the "House," we are not in accord with his plan to limit its membership to delegates from the government service, from other national bodies and from the State pharmaceutical associations, believing that the present broad allotment of delegates is much more democratic and yet is sufficiently limited geographically to prevent one section from outvoting all of the other parts of the country.

We hope, therefore, that the representation in the House of Delegates will continue to include all interested affiliated bodies, including local branches of the Association, colleges and boards of pharmacy. Whether both a college and its alumni association should be given representation we are not certain, but the broader the basis of representation the more truly national will be the results of the votes taken.

We feel that the present plan of using the House of Delegates merely as "a place to let off steam," as some one expressed it, or as an unofficial resolution committee is a mistake; but we hope that the Association will not, because of this initial error, perpetrate the greatest error that has been threatened of abolishing the House entirely.

Third: The plan outlined by President William C. Alpers in his presidential address. This plan recommends changes that are practically revolutionary and agree with those suggested by me above. If the recommendations be accepted, the House will become the dog and the Council the tail—thus completely reversing the present status of the two bodies. Representation will remain practically as at present with the exception that colleges and their alumni associations will have no special representation.

Limitation of time and space prevent the citing of many valuable suggestions that have been made by members who have given this subject earnest thought. For the benefit and convenience of those interested a list of references is appended.

In closing I would say, that if the House of Delegates is to remain with us, then much constructive work is needed to whip it into shape. It will take much time and work and thought. I join with our chairman in asking you to read and study the opinions expressed by many of our active members. Let us have your own. You owe this to your association.

To bring this matter properly before the House of Delegates two resolutions will be presented at the proper time: One, that it is the sense of the House of Delegates that an amendment to the Constitution be drawn up and presented to the Council or General Session at this meeting making the House of Delegates the Legislative Body and the Council the Executive Body of the Association. Two, that a committee be appointed to draw up such an amendment or amendments and to report on recommendations as to the personnel of the reorganized body.

REFERENCES:

Resolutions Creating a House of Delegates—J. A. PH. A., I, 928, Sept. 1912.

Minutes of the Third General Session, 60th Annual Meeting—J. A. PH. A., I, 1079, October 1912.

The New House of Delegates, Joseph W. England—J. A. PH. A., I, 1287, Nov. 1912.

Proceedings of the House of Delegates, 62d Annual Meeting—J. A. PH. A., III, 1403, October 1914.

The House of Delegates, Henry P. Hynson—J. A. PH. A., IV, 524, April '15.

The House of Delegates, Additional Information, Henry P. Hynson—J. A. PH. A., IV, 844, July 1915. (This includes opinions and suggestions by Messrs. Beal, England, Kremers, Wulling, Koch, Mittelbach, Sayre, Stewart, Nitardy, LaWall, Woodruff, Jordan, Day.)

Report of the Committee of the Council in the House of Delegates, George M. Beringer, Chairman—J. A. PH. A., IV, 1252, October 1915.

Report of the Special Committee on House of Delegates—J. A. PH. A., V, 8, January 1916. (This includes minority and majority report of the committee as well as reasons for same by Messrs. Hynson, Freericks, Anderson and Lemberger.)

THE CHAIRMAN: Gentlemen, it was ordered at San Francisco that a committee be appointed to take into consideration the House of Delegates, its welfare and future. I had so much difficulty in getting anyone to serve on that committee that I thought it would be a good plan to let the officers constitute that committee. I have voiced my feelings, Mr. Hostmann has voiced his and there is a paper by Mr. Nitardy, the vice-chairman. I apprehend that you will appoint a committee to consider these contributions, and I think Mr. Nitardy would be satisfied if we refer his paper to that committee, and therefore I will not insist on that part of the program being carried out unless someone here would like to read the paper. I believe it would be more interesting, just at this time, for those who have been impressed by what has been said to enter a discussion of this subject. I think, Mr. Hostmann, if you will present the resolutions you have prepared we might come to some conclusion in regard to the welfare of the House of Delegates. Personally I can not help thinking that delegates with unequal power and representing different interests will be hard to reconcile. I am perfectly willing, however, to submit to the majority of this body. I think Dr. Rusby has some ideas regarding the House of Delegates.

H. H. RUSBY: Mr. Chairman, I do not think I have any very definite ideas because I have never gone into a study of this question, but I certainly do approve of separating executive and legislative functions. I do not believe it is right for the Council of the Association to engage in both legislation and execution; that part of these reports I should heartily approve.

H. V. ARNY: Mr. Chairman, do I understand the recommendations in the Secretary's report are, that steps should be taken to revise the constitution? If the constitution is to be amended that means, I believe, a year, does it not?

J. H. BEAL: I think it does.

H. V. ARNY: What I had in mind was, whether we could, without difficulty, recommend that steps be taken which would mean a year's postponement, at least. I think the Chairman has in mind the authorizing of the appointment

of a committee to consider this exceedingly knotty problem. Therefore, to open the discussion on the matter, I move it is the sense of this House of Delegates that such a committee be appointed.

THE CHAIRMAN: That a committee be appointed to present suitable amendments to the Constitution and By-Laws?

H. V. ARNY: Yes, that is the idea. We realize this is an exceedingly serious step and should not be taken without careful consideration by a proper committee. Therefore I make that as a motion. It is a question whether the House of Delegates has authority enough to appoint its own committee? Have we, or do we have to get the authority of the Council?

THE CHAIRMAN: I think we have that; we will take it anyhow.

H. V. ARNY: I wanted to be right on that point. I merely move the House of Delegates appoint a committee or, it is the sense of this meeting that we appoint a committee, to study this subject.

N. P. HANSEN: I believe in that motion. We should have a legislative body such as is contemplated. I therefore second the motion.

THE CHAIRMAN: Dr. Arny, do I understand that you make a motion that it is the sense of this House of Delegates that the House of Delegates shall be the legislative body of the American Pharmaceutical Association?

H. V. ARNY: I did not go that far. I went only so far as to say that this House should appoint a committee to study the suggestions made by the Secretary, which represent a part of your committee report, on the question of the possibility of making this House of Delegates a legislative body. Personally, I do not know whether I want to go on record at present as recommending it or not. I meant it would be much better for us to depend upon our committee to formulate the plan or think the matter over and thresh it out.

THE CHAIRMAN: And report at the next meeting?

H. V. ARNY: And report at the next meeting, yes.

THE CHAIRMAN: How many shall constitute such committee?

H. V. ARNY: Five.

THE CHAIRMAN: Mr. Hansen, I understand you seconded that motion?

MR. HANSEN: I did, sir.

THE CHAIRMAN: Gentlemen, it has been moved and seconded that the House of Delegates elect a committee of five to consider the recommendations made by Secretary Hostmann and report at the next meeting, to-morrow afternoon at four o'clock.

H. H. RUSBY: In reference to that motion, Mr. Chairman, I understand that the Secretary's paper makes several recommendations. Should we act on all those recommendations? In other words, why not include in Professor Arny's motion that the committee take up all these recommendations and report at the next meeting?

H. V. ARNY: That is exactly what I meant. I would prefer to make this a committee on president's address, and that these reports be considered by the committee.

H. H. RUSBY: That would cover everything.

SECRETARY HOSTMANN: That committee ought not to report to-morrow. I think it would need a little more time than it could have before the next meeting.

THE CHAIRMAN: Report Friday?

THE SECRETARY: It might be able to report Friday, but I think if it were called upon to report to-morrow the subject would not be given one-half the time that it deserves.

THE CHAIRMAN: Shall we make it Friday at eleven o'clock? That is the set time for the third session. We want to arouse interest. The best way to help the committee is for somebody to say something on the subject; let us have a discussion. Dr. Beal, have you anything to say? You are the father of the House of Delegates and I believe you ought to take charge of it.

J. H. BEAL: Mr. Chairman, I want to say in the first place that I believe myself very much in accord with the sentiments expressed in the paper which the Secretary has read. Unfortunately I did not get the whole of it. I would like to call your attention to some of the facts connected with the organization of the House which did not appear in the paper. What was read to you as the original motion offered for the creation of the House was not the original motion. It was the motion, or it was what existed after the Council had acted and after the general session had acted and after the newly constituted House of Delegates had acted and made recommendations, which were incorporated in that motion. Like any human institution which grows, it didn't grow symmetrically and consistently. There were some inconsistencies. Now, for example, you must have noted that apparently the House of Delegates is an appendage with limited powers as compared to the Council. There is a reason for that. When the proposition of creating a House of Delegates was broached and was talked over generally among the members of the Association, those who were in favor of it were confronted all the time by this proposition, if you create this body and do not restrict it, it will run away with the Association; it will commit the Association, or possibly might commit the Association to a great many things that would be out of keeping with its traditions. It will overturn things generally. Therefore the inclusion of the reference of these acts to the Council was for the purpose of meeting that objection. I did not, but others did feel there was a danger. That restriction was then accepted by the sponsors of the House of Delegates, not because they believed it should be done, but as a concession to those who feared a great danger might result. I have always felt from the very first meeting, that it is wrong to have the resolutions of this body, selected as it is and constituted as it is, to go before the Council. The Council would cheerfully be relieved of that responsibility, if I understand the sentiments of those with whom I have conversed. The number of bodies which are represented in the constitution of this body were not provided for in the original motion. They were added to and added to, very largely at the suggestion or on the suggestion of the House of Delegates.

The House of Delegates, speaking frankly, is not what I think it ought to be. If it can not be made a more effective agency in the American Pharmaceutical Association and in the work of American pharmacy it might just as well be abolished. At the time I offered the motion for its establishment, I stated that it was considered merely as a germ of an idea which we hoped might grow into something strong and vigorous and truly representative of pharmacy, an effective instrument for good in the hands of the Association. At this time I would not undertake to formulate all of the ideas I have in view or in my mind, flowing around in a rather

chaotic condition, but I think the House of Delegates should be emancipated from the Council. It was stated at the time of inception, that we hoped the House of Delegates would become emancipated as soon as it could demonstrate the fact it was not a vision. I think the time has come to ask that the House of Delegates be emancipated from its tutelage to the Council; the membership should be limited.

I am not ready to go as far as Chairman Hynson has intimated, but I am inclined to meet him half way. I think we should avoid the duplication of representation as we now have it, and I heartily believe in the general proposition that the House of Delegates should become a legislative body of really important functions. I would not go so far as to say that at one time we should take away all of the legislative power of the Council, or that we should usurp the absolute legislative power of the Association, but I would materially enlarge the legislative powers of this body and make it subject, if subject to anybody, only to the Association. I believe that is all I am able to state in this off-hand manner.

H. V. ARNY: While Dr. Beal is on his feet, I should like his opinion as to whether a committee such as is to be appointed could intelligently report by Friday.

J. H. BEAL: Well, if you were to put Chairman Hynson, Secretary Hostmann and several others who have studied this matter constantly and carefully on the committee, I think they could make a pretty intelligent report by Friday. I do not anticipate that they could exhaust the subject; they would have plenty of unfinished business for next year, but I do really think that they could make a strong helpful report by Friday.

SECRETARY HOSTMANN: Mr. Chairman, one of the ideas I had in presenting these resolutions, which I intended to present at the last session of the House, was, that if this House recommended that the Constitution be amended next year—of course we could not amend it this year—it would take a year's time—I felt it would attract more interest and lead to more discussion than we have gotten in the past. Every year you hear about the House of Delegates, "no good," "ought to be abolished," "something ought to be done with it," but that is as far as we get. We are no further to-day than we were three years ago, and my idea in presenting these two resolutions at a later time was, that a committee appointed for some such purpose would report these resolutions and present them to the House, the House would accept them and recommend them to the Association. Now if the Council sees fit to reject them, or if the Association in general session sees fit to reject them it does not make much difference. The discussion is going on and would be much more interesting and more members would take an interest in it than are here now. At the present I do not believe anybody takes an interest in the House of Delegates unless he is stirred up by someone.

One of the references that I have made is to a paper that appeared in the JOURNAL, where not only the opinion of Chairman Hynson appeared but opinions were expressed by quite a few active members of the Association, in letters that were written to Chairman Hynson, in reply to letters sent out by him. It was very kind of Dr. Beal to say that because he, himself, and Dr. Hynson and I, perhaps, have given this a little more thought than some of the other members, we might be able, if you did see fit to put us on that committee, to make an intelligent report. But that report would not be what I had in mind when I was

drawing up these resolutions. My idea was, that we would have a committee that would do some real work and report next year.

J. H. BEAL: Mr. Chairman, just one other thought. While it would not be possible to amend the Constitution, it seems to me that the House of Delegates could be very properly provided for in the By-Laws of the Association, and if later on it seemed important to make it a part of the Constitution instead of the By-Laws, that could be done at leisure.

H. H. RUSBY: Mr. Chairman, I think it might be well for the Secretary to read to us these two resolutions of which he has spoken and then we could refer them to this committee. They have not come before us yet, so we can not very well refer them.

SECRETARY HOSTMANN: I have not drawn the resolutions up, but I think I can express the sense of the resolutions I propose offering.

THE CHAIRMAN: You had better let me put this motion in regard to the appointment of a committee and then they can refer anything to that committee that they see fit. It has been moved and seconded that a committee be elected.

SECRETARY HOSTMANN: That motion read appointed and not elected.

H. H. RUSBY: Mr. Chairman, I want to make an amendment that you act as the chairman of that committee.

H. V. ARNY: I heartily accept that amendment.

THE CHAIRMAN: And appoint four other members?

(The motion was put and carried.)

The following members were named on the committee: Chairman, H. P. Hynson, H. H. Rusby, Jeannot Hostmann, Leonard Seltzer and N. P. Hansen.

THE CHAIRMAN: Now, gentlemen, what else can we do this afternoon? We had better appoint a committee on credentials. If we are going to make a serious thing of this, we want the delegates properly authenticated. Will someone move that a committee on credentials be appointed?

N. P. HANSEN: Mr. Chairman, I move that a committee on credentials be appointed, of three members.

(This motion was duly seconded, put before the House and carried.)

THE CHAIRMAN: I appoint as the Committee on Credentials: Joseph Weinstein, R. S. Lehman, and Otto F. Claus.

N. P. HANSEN: I move we adjourn until to-morrow at four o'clock.

(This motion was duly seconded, put before the House and carried.)

VICE-PRESIDENT'S ADDRESS.

THE FUTURE OF THE HOUSE OF DELEGATES.

BY F. W. NITARDY.

This paper has been written at the specific request of our able chairman, Dr. Hynson. I tried to persuade him that any effort on my part for the re-organization of the House of Delegates would be superfluous in view of his own convincing arguments, but Dr. Hynson informed me that he had his mind set on carrying out a program in which I as vice-chairman was slated for an address under the above title, so there was nothing left to do but comply with the wishes of our esteemed friend.

Before approaching the subject proper let me speak for just a moment on the past activities of the House of Delegates. I believe that I have attended all its meetings up to the present and it seems to me there has existed in the minds of most of the delegates a rather confused idea as to its actual purpose. Its meetings have been poorly attended and have accomplished little outside of acting as a sort of a resolution committee, receiving resolutions and turning them over to the General Session for action.

That the House of Delegates under proper organization and with definite functions has before it a future of valuable service to pharmacy will be readily admitted. Our friend, Dr. Hynson, has told us several times of the excellent organization of pharmacy in its various branches and also stated that there was little further need for organization except in coördinating the various branches so that they might work with greater harmony and efficiency and herein, I believe, lies the future of the House of Delegates.

There exists at present in practically every State of the Union a powerful and efficient pan-pharmic organization generally known as State Associations. These bodies are working along on individual lines and are not definitely coördinated with each other or affiliated with a national body of similar catholic membership to-day. True, some of these associations send delegates to the meetings of other association but at present this exchange of delegates is more or less of a social courtesy and of very little practical value. Great things could be accomplished to the benfit of every state association as well as the American Pharmaceutical Association, if these state bodies could be coördinated and affiliated with our national body in a manner that will insure active coöperation and mutual support and it is in this capacity that the House of Delegates can become a factor in American pharmacy and I shall speak of the future of the House of Delegates with this condition in view.

The House of Delegates would then form a connecting link between the various state associations and the American Pharmaceutical Association and be an organization in which the state association delegates could exchange ideas of interest to their respective organizations as well as a body in which such local or state work worthy of assuming national scope may take definite form. Its sessions would be the place in which papers of particular value to state organizations would be read and discussed. The American Pharmaceutical Association would, in the event of being confronted with problems affecting the entire country, but which could not be solved successfully without the active support and aid of the state associations, find in this body a useful agency for enlisting their active coöperation and in turn, state associations endeavoring to bring about greater uniformity in pharmaceutical laws and practices could through the House of Delegates impart their ideas to the national body and to other state associations in the most effective manner.

There is so much work of this character to be done and so much good that could be accomplished, that the sessions of the House of Delegates would prove of exceptional interest and be well attended because they would represent a definite phase in the development of pharmacy and yield definite results. The close analogy of such linking of state and national bodies to the Federal and State government and identical geographical distribution and representation would make it particularly valuable in many ways. Its membership should be composed entirely of accredited delegates from state associations. These delegates should be members of the American Pharmaceutical Association or at least become members when attending the convention as delegates. Its relation to the American Pharmaceutical Association should be similar to that of the Sections. It should have its own constitution and by-laws, and have definite powers. Its decisions in matters affecting the particular scope on which its activities are concentrated should be final and require no further sanction of the Council or the General Session. But it should also have the right to refer certain issues affecting the national body or its policies to the Council or General Sessions for action. It should be given a definite yearly appropriation to meet its expenses and might possibly have representation in the Council. It should have the power to appoint committees to carry on the various phases of its work and its sessions should be given equal space on the program with those of the Sections.

Under such conditions its future would be assured and its activities would be a valuable asset of pharmacy in general and the various state associations and the American Pharmaceutical Association in special. It would form a powerful and influential connecting link between the American Pharmaceutical Association and state associations, representing their combined influence and by coördinating the state associations make each a more powerful and influential body than it could otherwise be. Its support or opposition on questions of state and national interest would be a factor, bound to be recognized by politicians, legislators and outside interests. It would represent an influential membership of the combined total of all state associations and the American Pharmaceutical Association, which is indeed an imposing strength.

To represent a state organization in a body of this kind would certainly be an honor and privilege worthy of the efforts of the greatest men in pharmacy to-day.

PHARMACEUTICAL FORMULAS

PROPOSED FOR A. PH. A. RECIPE BOOK.

A complete list of these Proposed Formulas since February 1912 was published in an Index in the December 1916 number of the JOURNAL. The Committee will continue its work in monthly instalments in this Department of the JOURNAL. Members of the A. Ph. A. are earnestly requested to send suitable formulas and also criticisms of those published to the Chairman,

Otto Raubenheimer, Brooklyn, N. Y.

PHOTOGRAPHIC FORMULAS.

It has been decided to have a Chapter on this important subject in the A. Ph. A. Recipe Book. The increasing value of a knowledge of practical photography makes it necessary that pharmacists should become more familiar with the technical details. Very frequently they are called upon to prepare various photographic solutions or to give advice on this subject. Many pharmacists in the city and country are deriving a handsome profit from such knowledge and also from the sale of photographic accessories.

The following introductory chapter is borrowed from *MacEwan's Pharmaceutical Formulas* for the purpose of making the pharmacist acquainted with the history and chemical composition of the newer photographic developers.

DEVELOPERS.

In compounding developers the main things to keep in mind are to use distilled water and take great care that organic matter does not come in contact with the reducing-agent. If the solution containing the developing-agent must be filtered, asbestos or glass wool should be employed as the filtering-agent.

The following short notes on the various developing-agents in use are arranged in chronological order, and will no doubt be of interest.

Pyrogallic Acid, or Pyrogallol.—First employed for developing gelatinobromide plates by Dr. Maddox in 1871, and still the favorite with most workers in photography. The average quantity of "pyro" used to each ounce of water for a developer is 1 1/2 grains, with ammonia water, sp. gr. 0.88 (rarely now) or sodium carbonate 24 grains, and sodium sulphite 24 grains. Representative formulas are given later.

Ferrous Oxalate.—Introduced as a developer by Carey Lea in 1877, but the solution now in use was suggested by Eder in 1879.

Hydroquinone, or Quinol.—Discovered to have developing-powers by Sir William Abney in 1880. Is a favorite developing-agent with amateurs. Works best when used with potassium carbonate or hydroxide, but sodium carbonate or tri-sodium phosphate as the alkali gives softer negatives. The average composition of the developer is 3 grains quinol in each ounce, with potassium bromide 1/2 grain, sodium sulphite 15 grains, and potassium hydroxide 4 grains.

Pyrocatechin, or Catechol, was found by Eder and Toth in 1880 to have developing-power. The solution does not discolor so readily as quinol. With sodium hyposulphite it has been recommended for use in cases where it is desired simultaneously to develop and fix negatives. "Kachin" is the trade-name for a mixture of catechol, potassium hydroxide, and sodium sulphite.

Eikonogen, the sodium salt of amido-beta-naphthol sulphonic acid, was discovered by Professor Meldola in 1880, and found by Andresen in 1889 to possess developing-power. The salt is best dissolved in hot water. The proportions for each ounce of developer are eikonogen 9 grains, sodium sulphite 35 grains, potassium carbonate 23 grains.

Metol.—Andresen's metol is methyl-para-amido-phenol; Hauff's metol is a homologue, methyl-para-amido-meta-cresol. The average quantity of metol in an ounce of developer is 2 1/2 grains, with potassium bromide 3/4 grain, sodium sulphite 24 grains, and sodium carbonate 18 grains.

Para-amido-phenol, patented in 1891, is sent out as the hydrochloride. When exactly sufficient caustic alkali is added to convert the salt into a phenolate, the concentrated liquid is known as "rodinal." Rodinal requires to be diluted with from twenty to thirty times its bulk of water before use.

Glycin, or para-oxy-phenyl-glycin, is a slow developer, but most suited for line negatives in process-work, and for "stand" development.

Amidol, or diamido-phenol hydrochloride, was first made by Gauche in 1869, but patented as a developer in 1892. The developer should be freshly made by dissolving the amidol in solution of sodium sulphite. The average proportions are amidol 1 1/2 grains, sodium sulphite 48 grains, and potassium bromide 1/2 to 1 1/2 grains in each ounce.

Diphenal, or di-amido-oxy-di-phenol, is made by Cassella & Co., Frankfort, as a liquid, and requires dilution with from fifteen to twenty times its volume of water for use.

Adurol is the chloro- or bromo- derivative of hydroquinone. The average composition of an ounce of adurol developer is adurol 4 grains, sodium sulphite 20 grains, potassium carbonate 24 grains, and potassium bromide 1/4 grain.

Imogen Sulphite is eikonogen modified by the introduction of another amido group and mixed with sodium sulphite.

Edinol, the hydrochloride of para-amido-oxy-benzyl-alcohol, does not require the use of caustic alkali. Resembles metol in its action, but is more soluble.

WORKING FORMULAS FOR DEVELOPERS.

No. 426.

ADUROL DEVELOPER.

A.

Adurol	170 grains
Sodium Sulphite	3 1/2 oz.
Water to	20 oz.

Dissolve.

B.

Potassium Carbonate	2 1/2 oz.
Water to	20 oz.

Dissolve.

For use, mix in equal parts.

No, 426 A.

ADUROL DEVELOPER.

(One-solution.)

Adurol	1 oz.
Sodium Sulphite	3 oz.
Potassium Carbonate	6 oz.
Water to	20 oz.

Dissolve.

For use, dilute with 3 to 5 parts of water.

No. 426 B.

AMIDOL DEVELOPER.

Amidol	48 grains
Sodium Sulphite	1/2 oz.
Water to	20 oz.

Dissolve.

Contributed by Irwin A. Becker, Michael Reese Hospital, Chicago:

DEVELOPERS.

No. 426 C.

All-round M-Q Developer.

Water	100	mils
Metol	0.2	Gm.
Hydroquinone	0.15	Gm.
Sodium Sulphite, dry	2.25	Gm.
Sodium Carbonate, dry	3	Gm.

Use full strength for single coated plates. Add equal parts water for double coated plates. Good for commercial work, and lantern slides.

No. 427.

EXTREME CONTRAST DEVELOPER.

Where absolute black and white are desired.

Water	100	mils
Sodium Sulphite, dry	13	Gm.
Sodium Carbonate, dry	13	Gm.
Hydroquinone	2.25	Gm.
Potassium Bromide	0.35	Gm.

For use take equal parts of above and water. Develop 6 to 8 minutes at temperature of 70° F.

No. 428.

CONTRAST DEVELOPER.

For Over-exposed Plates.

Water	100	mils
Sodium Sulphite, dry	3.35	Gm.
Edinol	0.67	Gm.
Potassium Bromide	0.135	Gm.
Potassium Carbonate	1.67	Gm.

As soon as the plate shows over-exposure in normal developer, rinse and place in contrast developer until it has sufficient intensity.

No. 429.

EXTREME SOFTNESS DEVELOPER.

Where strong contrasts in the subject are to be avoided.

Water	100	mils
Metol	0.034	Gm.
Sodium Sulphite, dry	0.67	Gm.
Hydroquinone	0.165	Gm.

Develop for about 30 minutes at temperature of 65° F. to 70° F.

No. 430.

PYRO-ACETONE.

A.

Water	100	mils
Oxalic Acid	0.156	Gm.
Pyrogallic Acid	6.25	Gm.

B.

Water	100	mils
Sodium Sulphite, dry	10	Gm.
Acetone, pure	20	mils

For Tray: A 10 mils; B 10 mils; Water 120 mils. For Double Coated Plates use Water 160 mils.

For Tank: A 10 mils; B 30 mils; Potassium Iodide Sol. (0.2 percent) 20 mils; Water 580 mils.

Temperature 70° F.; Time 30 minutes.

Note: The addition of the Potassium Iodide Solution allows the use of the tank developer from 70° to 75° F. without causing yellow stain or veiling which is liable to occur otherwise.

No. 431.

GLYCIN.

For Tank.

Hot Water	100	mils
Sodium Carbonate, dry	4	Gm.
Glycin	0.8	Gm.
Sodium Sulphite, dry	0.8	Gm.

For use: Stock Solution 450 mils; Water 4230 mils.

Temperature 65° F.; Time 30 minutes.

No. 431A

BROMIDE DEVELOPERS.

Developers for Bromide and other developing-out papers should be made according to the formulas furnished with each brand or kind of paper, as recommended by the manufacturers.

X-RAY DEVELOPERS.

The temperature should range from 65 to 72° F. If warmer, the developer may cause chemical fog or unsatisfactory plates, due to fast development.

No. 432.

DR. WILLEY'S FORMULA.

A.

Boiling Distilled Water	100	mils
Sodium Sulphite, dry	17.72	Gm.
Edinol	2	Gm.
Hydroquinone	2.95	Gm.
Potassium Bromide	2.425	Gm.

B.

Water	100	mils
Potassium Carbonate	23.6	Gm.

Use: A 50 mils; B 50 mils; Water 100 mils.

No. 433.

GLYCIN-HYDROQUINONE.

A.

Water	100	mils
Glycin	1.477	Gm.
Hydroquinone	4.43	Gm.
Sodium Sulphite, dry	8.86	Gm.
Potassium Bromide	0.37	Gm.

B.

Water	100	mils
Potassium Carbonate	11.8	Gm.

For use take equal volumes of A and B.

No. 434.

METOL-HYDROQUINONE.

Water	100	mils
Metol	0.216	Gm.
Hydroquinone	0.864	Gm.
Sodium Sulphite, dry	4.725	Gm.
Sodium Carbonate, dry	4.725	Gm.
Potassium Bromide	0.108	Gm.

Develop 3 to 4 minutes.

FIXING SOLUTIONS.

No. 435.

ACID FIXING AND HARDENING BATH.

For Plates.

A.

Water	100	mils
Sodium Thiosulphate	25	Gm.

B.

Water	100	mils
Sodium Sulphite, dry	9	Gm.
Sulphuric Acid	1.5	mils
Powdered Chrome Alum	6	Gm.

or B. Alternative.

Water	100	mils
Potassium Metabisulphite	9	Gm.
Powdered Chrome Alum	6	Gm.

Mix solutions exactly and in rotation of ingredients. Always pour A into B while stirring well. If this is not done, precipitation will take place. During cold weather one-half the quantity of B is sufficient for full quantity of A.

No. 436.

ACID HYPO FIXING BATH.

For Developing-out Papers.

Water	100	mils
Hypo (Sodium Thiosulphate)	25	Gm.
Water	7.5	mils
Sodium Sulphite, dry	1.5	Gm.
Acetic Acid(28 percent)	4.5	mils
Powdered Alum	1.5	Gm.

No. 437.

PLAIN HYPO BATH.

Water	100	mils
Hypo	25	Gm.

No. 438.

IRON CLEARING SOLUTION.

Water	100	mils
Iron Sulphate (Clear Crystals)	14.2	Gm.
Sulphuric Acid	5	mils
Powdered Alum	4.725	Gm.

To remove yellow stain by Pyro or Hydroquinone Developer, wash well to free from hypo and place in above *until stain is gone, then wash well.*

No. 439.

CHEMICAL FOG.

For Chemical Fog use Red Prussiate Reducer, using double quantity of water. As soon as fog is gone, wash well.

INTENSIFIERS.

No. 440.

INTENSIFIER.

For Extreme Intensification from Weak Negatives.

A.

Water	100	mils
Uranium Nitrate	8.84	Gm.
Nitric Acid	3.125	mils

B.

Water	100	mils
Potassium Ferricyanide (Red Prussiate)	5.9	Gm.

To use—Take 10 mils of A; 10 mils of B, and water 320 mils.

No. 441.

MERCURY INTENSIFIER.

For Moderate Intensification.

Mercury Bichloride	2.15	Gm.
Potassium Bromide	2.15	Gm.
Water	100	mils

Have negative absolutely free from hypo, and soak in above till milky white, then blacken in a solution of

Sodium Sulphite	11.34	Gm.
Water	100	mils

Wash thoroughly.

No. 442.

CHROMIUM INTENSIFIER.

C. Welborne Piper.

Potassium Dichromate	2.15	Gm.
Hydrochloric Acid	1	mil
Water	100	mils

Bleach in this solution, wash until free from yellow stain, and re-develop with Amidol, or other non-staining developer. Prolonged washing after fixation is not necessary with this intensifier and the process may be repeated if greater intensification is required.

REDUCERS.

No. 443.

FARMER'S, H.

Attacks *thin* part of image first and *increases contrast.*

Hypo solution 1 in 5, add enough Potassium Ferricyanide solution to give a pale yellow color. Negatives must be thoroughly soaked in water before immersion in this solution. As soon as reduction has proceeded far enough plunge into water and wash thoroughly.

No. 444.

PERSULPHATE REDUCER.

For Negatives that are *too contrasty*, attacks *dense* portions *first.*

Ammonium Persulphate	3.5	Gm.
Sulphuric Acid	2	drops
Water	100	mils

As soon as negative is sufficiently reduced, immerse in 5 percent Sodium Sulphite, then wash.

No. 445.

COLOR-SENSITISERS.

For Plates.

Non-color sensitive plates are made sensitive to the entire spectrum by bathing in the following solution:

Pinacyanol (stock solution)	2 parts
Pinachrome (stock solution)	3 parts
Distilled Water	50 parts

The stock solutions contain 1 part dye in 1000 of Alcohol. They keep well. The dilute solutions do not keep, and should be mixed immediately before use, and not used more than twice.

Bathing is carried out the same way as development, either in dish or tank, in complete darkness, or the light of a panchromatic safe-light. In dish—Immerse plates for 3 minutes, rocking continuously. In tank—Dilute the above 20 times and leave plates in 20 minutes, reversing tank once or twice. Wash plates in running water for 5 minutes and place on rack to dry, preferably in a dark cupboard, through which a current of dry air can be passed and kept about 80° F.

No. 446.

HYPO ELIMINATOR.

Place plates or prints in several changes of water to which sufficient Potassium Permanganate solution has been added to a *pale pink* color, until the pink color is no longer readily discharged. Then rinse in water. Caution: Too strong a solution acts as a reducer.

PROCEEDINGS OF THE LOCAL BRANCHES

"All papers presented to the Association and its branches shall become the property of the Association, with the understanding that they are not to be published in any other publication than those of the Association, except by consent of the Committee on Publication."—By-Laws, Chapter X, Art. III.

Reports of the meetings of the Local Branches should be mailed to the Editor on the day following the meeting, if possible. Minutes should be *plainly* written, or typewritten, with wide spaces between the lines. Care should be taken to give proper names correctly, and manuscript should be signed by the reporter.

BALTIMORE.

The Annual Meeting of the Branch was held January 29, 1917, at Harris Hall, in the University of Maryland, with the President, Mr. Louis Schultze, in the chair.

The Secretary gave a résumé of the work of the year, saying that all of the regular meetings had been held and that no reports of those since the March session had been sent to the journals, as it had been physically impossible for him to get the matter into readable shape in time for publication, as 1916 had been the most strenuous year of all his business career and that 1917 is a husky infant.

A resolution passed by the Philadelphia Branch, in which it went on record as favoring the continuation of both the JOURNAL and the Year Book, was read, as was also a resolution passed by the New York Branch in which it stated that it had considered the resolution of the Philadelphia Branch, and, inasmuch as the result of the recent referendum vote on this subject by the entire membership of the Association was not known, a committee had been appointed and is to report at a future meeting.

One of the members stated that when he voted he had written on his ballot that he favored the continuance of the Proceedings as in the past, or the Year Book as at present, but that the editions be issued more promptly, the dropping of the JOURNAL, but did favor the incorporation of it with some pharmaceutical journal which could furnish a certain number of pages for the use of the Association. The Association to assume the responsibility for the matter published thereon, and, inasmuch as *one journal* had regularly given considerable space to the monthly reports of the Branches, he suggested that the added prestige from the first publication of the Association's activities, papers and Branch news would be very desirable for it and would be seriously considered.

After a lengthy discussion in which all phases of the subject were considered, it was resolved: That it was the sense of the Branch that it approved of the action of the New York Branch and felt it best to wait for the result of the referendum vote before proceeding further. Doctors Caspari and Kelly had been asked to discuss the U. S. P. IX and took the lead in the consideration of it which followed.

The opinion of the authorities was stated to be that the U. S. P. VIII is official till Congress or the legislatures say otherwise, as the legislative bodies can not make an authority legal which did not exist at the time the legislation was enacted. Congress has taken no action and none seems likely at this session. National officials seem reluctant to give any opinion at all but the general verdict seemed to be that in the event of prosecution for violation of the law, the officials would take into consideration the edition used by the accused and he would be judged accordingly. It was considered, therefore, important to label all preparations as U. S. P. VIII or U. S. P. IX for the present.

It was pointed out that the tolerances in strength above and below the standard in the new U. S. P. IX are practically what the officials have been allowing and that their incorporation in the new book makes it more desirable for the pharmacist than the old one.

Many questions were asked and answered as to changes in preparations and it was brought out that the alternative of charging solution of magnesium citrate with sodium bicarbonate was fraught with danger if the powder and not the tablet was used as the sudden liberation of gas and consequent sudden increase of pressure would tend to burst the bottle in the hands of the operator. One member stating that while he felt such would be the case, nevertheless tried it with disastrous results.

It was brought out that the Get-rich-quick-

Wallingford-priced tablets of sodium bicarbonate put out by some of the manufacturers were compressed so hard as to be just a little more soluble than the average pebble from the beach, and as a result took so long to dissolve and were so high in price that he had dampened a mixture of sodium bicarbonate 4 parts and powdered sugar 1 part with sufficient water to form a moist powder, pressed through a number five sieve and dried it at a low temperature. Forty-one grains of the resulting granules were used and they completely dissolved in from three to three and a half minutes. About five hundred bottles had been charged with such a granulated sodium bicarbonate and no explosions resulted.

Among those who took part in the discussions besides the speakers of the evening were Misses Cole, Lotz, Mossup, Sonneborn and the Messrs. Hancock, Lentz, Lowry, Schultze and Ware.

The officers elected for the ensuing year were as follows:

President, H. A. B. Dunning; *Vice-President and Chairman Executive Committee*, Frantois Lentz; *Secretary and Treasurer*, B. Olive Cole, 303 W. Pratt St., Baltimore; *Member of Council*, Hermann Engelhardt; *Chairmen of Committees: Membership*, Charles H. Ware; *Professional Relations*, C. L. Meyer; *Science and Practice of Pharmacy*, E. F. Kelly; *Education and Legislation*, Charles Morgan.

WM. J. LOWRY, JR., *Secretary.*

CHICAGO.

The executive committee of the Chicago Branch, A. Ph. A., has prepared a tentative program for the coming Branch meetings.

At the February meeting Dr. Robert A. Hatcher, of New York, one of our best posted men on the assaying of drugs by testing on animals, will discuss in a general way the Biological Assays of the new U. S. Pharmacopoeia.

The March meeting will include a discussion on the value to pharmacy of the cultivation in this country of medicinal plants. Dr. W. W. Stockberger, of the Dept. of Agriculture in Washington, will lead the discussion with an address illustrated by many fine lantern slides, showing the state of the industry at present.

In April, a discussion of the business end of retail pharmacy will come up, especially the buying end of the business. Able speakers representing the manufacturers, the jobbers, buying clubs, etc., will take part. The object of the meeting is to show the average retailer how he can improve his buying methods.

The meeting in May will be the last before the summer conventions. The appointing of delegates to the state and national conventions and instructions to the delegates will be an important feature of the meeting. The Executive Committee desires that the Chicago Branch will formally invite the Association to hold its 1918 Convention in Chicago.

E. N. GATHERCOAL, *Secretary.*

CITY OF WASHINGTON.

The December meeting of the Branch was held at the National College of Pharmacy, Dec. 27, 1917, and was made a memorial meeting so that the members of the Branch would have an opportunity to pay tribute to the memory of our late member Martin I. Wilbert.

At the opening of the meeting the Nominating Committee reported the following nominations, and on motion duly seconded and carried the gentlemen named were elected unanimously:

W. W. Stockberger, *President*, S. L. Hilton, *First Vice-President*, W. S. Hubbard, *Second Vice-President*, H. C. Fuller, *Secretary and Council member for the unexpired term of 1 year*, Lewis Flemer, *Treasurer.*

The Committee appointed at the lass meeting to draft suitable resolutions on the death of Martin I. Wilbert, presented the following resolutions which were unanimously adopted and the Secretary directed to forward a copy to Mrs. Wilbert and also the Council of the American Pharmaceutical Association:

RESOLUTIONS PRESENTED AT A MEETING OF THE CITY OF WASHINGTON BRANCH OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, DECEMBER 27, 1916.

By the death of Martin I. Wilbert, one of the ablest representatives of the pharmaceutical profession has been removed from the field of activity. Mr. Wilbert's many years in the active practice of his calling resulted in his obtaining a thorough knowledge of, and a wealth of experience in all branches of pharmacy and his wide acquaintance and association made him appreciative of the relations between his own and the allied professions of Chemistry and Medicine. His industry and his enthusiasm were unbounded, and were typically characteristic of the man, and these qualities, together with his broad and tolerant outlook and his kindly and genial nature endeared him to his friends and begat the es-

teem of all his associates. He was one of the founders of the Washington Branch of the American Pharmaceutical Association and an energetic worker in its behalf.

Mr. Wilbert died on the firing line with many years of activity still before him, a comparatively young man, an inspiration to his immediate contemporaries and the youth of the pharmaceutical profession.

Be it resolved, therefore, by the Washington Branch of the American Pharmaceutical Association that the sincere sympathy of the officers and members be extended herewith to Mrs. Wilbert in her great loss and that a copy of these resolutions be transmitted to the Council of the American Pharmaceutical Association to be spread upon the records.

(Signed) H. C. FULLER,
WYMOND H. BRADBURY,
LEWIS FLEMER, *Committee.*

Dr. Murray Galt Motter, a co-editor on the Digest of Comments of the U. S. P. VIII, as published by the Public Health Service opened the meeting and paid a glowing tribute to the memory of his collaborator. There is probably no one that is better able to speak of his many good qualities and the many sacrifices that he made as Dr. Motter, and in the course of his remarks said that Martin I. Wilbert was and had been for years the strongest link between the medical and pharmaceutical professions, he spoke of his early education in Canada where he acquired French and some German and later finished German at the German Hospital, Philadelphia, where he was pharmacist in charge and X-ray expert. He resigned his position at the German Hospital to accept a position in the Public Health Service, believing he could broaden his field of usefulness and here accomplished far more than was ever expected of him, he was an untiring worker always with good ideas and ever ready to undertake any problem, he was a source of information constantly sought after by every one he came in contact with and he could always enlighten those that came to him or inform them where they could obtain the desired information. He always looked far ahead and felt that further legislation should be enacted to better control the use and distribution of narcotic drugs, whatever credit that is due for the work on the Digest should go to Wilbert. He also spoke of his many sterling personal qualities and his kindly disposition and said that the Service would find it exceedingly difficult to find some one to take his place.

Dr. Kalusowski, the retiring president, being absent owing to illness, was prevented from adding further remarks.

Mr. Lewis Flemer, the president, spoke along the same lines as Dr. Motter but not so fully as he had not been so closely associated.

Dr. Chestnut, of the Bureau of Chemistry, paid a glowing tribute to his memory as likewise Dr. Posen and Mr. Hilton, whereupon the meeting adjourned.

S. L. HILTON, *Secretary.*

DENVER.

The January meeting of the Denver Branch of the American Pharmaceutical Association was held at the Metropole Hotel, January 16. President Hover called the meeting to order after the usual dinner; following the reading and approval of the minutes of the December meeting, the Secretary read a letter from the American Fair Trade League in regard to the Stevens bill, and a communication from the Philadelphia Branch of the A. Ph. A., offering a resolution in reference to the Year Book. As the branch had taken similar action at its December meeting, no action was necessary on the Philadelphia resolution.

The Secretary then offered the following amendment to the by-laws of the branch:

Article I, Section 1, to be amended by inserting the word "and" between Secretary and Treasurer.

Article II, Section 6, eliminate the word "treasurer" in the first line, and the following portion of this section: "Collect all dues and other money, pay out such money as authorized by the president or executive committee."

Create a new section under Article II to be known as Section 7, and to read as follows: "The treasurer shall collect all dues and other money coming to the Branch, and pay out of the funds so collected, all bills incurred by the Branch on presentation of a bill or invoice, properly signed or O. K.'d by the President, Secretary or Librarian. He shall keep an accurate account of all moneys received and paid out and keep separate account of the library and general receipts and expenditures, and render a complete report at the January meeting each year."

As new officers for the ensuing year were to be elected at this meeting, it was proposed that in consideration of this, the by-laws requiring a month's notice of amendment, should be suspended in this instance, providing the submitted amendment would receive unanimous approval of all members present.

A vote was taken, and the amendment unanimously approved. Nominations for a treasurer were therefore in order, for which office L. A. Jenson was nominated. The election of other officers was then in order, and the following were unanimously elected:

President, A. W. Clark; *First Vice-President*, L. Wilson; *Second Vice-President*, S. T. Hensel; *Librarian*, W. T. Hover; *Treasurer*, L. A. Jenson; *Secretary*, F. W. Nitardy.

In the absence of Messrs. A. W. Clark and L. Wilson, Second-Vice President Hensel assumed the chair. A speech was called for, to which Mr. Hensel responded.

Mr. Se Cheverell was then called upon to outline the proposed amendments of the Pharmacy Law. The proposed propositions were taken up one by one, discussed and voted on.

Question 1. Shall membership in the Colorado Pharmacal Association be made a requisite for registration? (This is done in South Dakota and Utah.)

Discussed by Messrs. Se Cheverell, McKenzie, Nitardy, Hover and others. On motion was unanimously approved.

Question 2. Shall the State Board of Pharmacy be empowered to employ the Secretary outside the profession of pharmacy, the duty of such Secretary being to prosecute violations of the pharmacy law? This will entail an increase in examination and renewal fees, but can easily be done if point number one is carried out.

This question was discussed by Messrs. Hover, Clayton, Nitardy and Gregory, after which an amendment was offered by Dr. Engle, proposing the employment of an attorney, instead of a secretary, and after a further discussion the amendment was adopted and this proposition amended, approved unanimously.

Question 3. Shall separate lists of questions be prepared by the Board, for assistant and full registration?

After some discussion, it was decided that this should be left to the discretion of the Board, and not a part of the law, therefore, no action was taken.

Question 4. Shall the State Board be authorized to reciprocate in registration with other States?

On motion, this received unanimous approval of the Branch.

Question 5. It has been suggested that all persons or firms, dealers in drugs and medicines in any way, be compelled to register with the State Board, under various classes. Class A, full registered pharmacists; Class B, assistant pharmacists; Class C, apprentices; Class D, local drug dealers. This class includes dealers in towns of less than 500 persons, general merchandise stores, etc., permitted under our present law to sell drugs when no pharmacy is established in the community, and this registration should include a forfeiture clause, when a registered pharmacist establishes a drug store in the community. Class E, itinerant venders of drugs and medicines. It is recommended that a license of from $50.00 to $100.00 per month be required.

It has been suggested to make the fees for Class A, $4.00 per year, $2.00 of which is to go to the Colorado Pharmacal Association. Class B, $2.00 per year. Class C, $1.00 per year. Class D, $2.00 to $5.00 per year. Class E, $50.00 to $100.00 per month.

After considerable discussion, this section was unanimously approved with the understanding that the details of working out the various fees and privileges of the classes be left to the committee for adjustment.

Question 6. Shall the Board be empowered to revoke licenses for second or third convictions for violation of State or National narcotic or liquor laws?

After some discussion, it was decided that this section was an indirect reflection on the pharmacists, and should not form a part of the amended law, as there had been practically no violations by pharmacists of either narcotic or liquor laws within the State of Colorado, during the past year.

Question 7. Shall failure to answer the questions of the Secretary of the Board, giving necessary information for the annual report, be grounds for forfeiting re-registration? (This is done in several states.)

After some discussion, it was decided that the Board should have power to obtain the information required, but that neglect in this respect should not result in forfeiture of registration. No action was therefore taken on this question.

Mr. Clayton stated that there were several things in his opinion, that should be considered in framing the amendments of the pharmacy law, that had not been mentioned by the Legislative Committee. The subjects he referred to were:

A requirement in the law that no one, except those licensed to operate a drug store, may use a sign or advertisement indicating

that their establishment or place of business, is a drug store or pharmacy. He stated a case which had come to the attention of the Board of Pharmacy, where a man, not a pharmacist, opened a place of business, and placed a drug store sign over same. A casual glance at the place would make one think that the place was a drug store, but on further examination it was found that no drugs were handled in this place, but instead only liquor and this in violation of the law.

The Denver Branch and the State Association, having both gone on record, favoring the requirements of college graduation after 1921, as a prerequisite for registration in Colorado, such provision should be included.

Under the present law, the Board of Pharmacy is greatly handicapped in enforcing the law, through lack of funds. It would, therefore, be advisable to provide further funds through increase in registration fees, examination fees, or the charge of a certificate fee from successful candidates.

After some discussion, it was moved that the first and third recommendation of Mr. Clayton be endorsed and carried unanimously.

Mr. Nitardy stated that, in view of the fact that the Branch had previously endorsed the second proposition, it would be desirable to endorse this also at this time, and moved that the second proposition be endorsed. A short discussion followed, in which Mr. Clayton made an eloquent appeal on behalf of the poor boy that might not have a chance to obtain a college education, and therefore, would be barred from entering pharmacy, in case such a law should take effect. A vote taken, on this question, stood: 6 for, 7 against, 9 not voting.

Mr. Hover was then asked to discuss the status of the Alcohol Bill, and its possibilities before the present legislature. Mr. Hover stated that he believed there would be no trouble in obtaining the desired legislation this year, as the Anti-Saloon League was in sympathy with the requirements in this respect, and that under proper handling it should be possible to have the desired legislation enacted. The subject of a formula for alcohol for bathing purposes was brought out in the discussion, and Mr. Hoover suggested that in the proposed Alcohol Bill, definite formulas be named for alcohol to be sold for bathing and technical purposes. He suggested that the formula known as the Tartar Emetic Formula, and which was approved by the County Medical Society, the State and City, the Denver Branch, The City Association, and the Anti-Saloon League, be used, and that possibly another formula for an undiluted alcohol, which could not be abused as an intoxicant, be also included. After some further discussion, it was decided to request the committee which had the Bathing Alcohol question in charge, to report on two suitable formulas to the legislative committee, same to be incorporated with the Alcohol Bill.

F. W. NITARDY, *Secretary.*

NASHVILLE.

The regular meeting of the Nashville Branch of the American Pharmaceutical Association was held in joint session with the Nashville Drug Club in the assembly room of the Nashville Business Men's Association, January 18, when Mr. D. J. Kuhn presided. About thirty druggists were present and this number included the members of the Tennessee Board of Pharmacy and Food and Drug Inspector, Harry Eskew.

Communications were read from the Philadelphia and New York Branches of the American Pharmaceutical Association, dealing with the financial condition of the Association. After considerable discussion of the subject by Messrs. Burge, Clark and Justice, a committee of three members was appointed to fully investigate the subject and bring in their report at the next meeting.

A resolution was passed commending the action of the Pure Food and Drug Commissioner in having four drug stores closed for violating the Tennessee Liquor Laws, and also urging action by the Courts in other similar cases now pending. Inspector Eskew spoke of the difficulty in enforcing laws with the limited number of men assigned for that purpose. He spoke for more sanitary methods in the operation of soda fountains, and pointed out the great danger of spreading disease through uncleanliness at the fountain, and asked the coöperation of all druggists in this matter.

A resolution was passed opposing the Lachleiter Bill before the Tennessee legislature, the purpose of which is to abolish the magistrate courts of Nashville.

F. W. Ward, of Memphis, invited the members to attend the Tri-State Druggists Association Meeting to be held in Memphis, June 12 to 14. This is to be a joint session of the State Associations of Mississippi, Arkansas and Tennessee, and Mr. Ward stated that from twelve to fifteen hundred druggists were expected to be in attendance.

Addresses were made by W. O. Nance, of Jackson, Harry Whitehouse of Johnson City, J. E. Justice of Clarksville and Dr. G. W. Hubbard. William R. White presented a paper on Dakin's Solution.

WILLIAM R. WHITE, *Secretary.*

NEW YORK.

The December 1916, meeting of the New York Branch of the American Pharmaceutical Association, was held in the Library of the New York College of Pharmacy, on Monday the 11th, at 8.30 P.M.

There were twenty-five members present. President Lascoff in the chair.

The minutes of the previous meeting were read by the Secretary and approved.

The Treasurer presented his report, which showed a balance of $111.70 on hand.

Membership Committee: The application of William E. Gifford, of 203 Fulton Street, New York, was ordered forwarded to the General Secretary.

Committee on Legislation and Education: Dr. William C. Anderson, chairman, reported on the hearings before the anti-narcotic legislative committee. He called attention to the fact that the largest illegitimate supplies are obtained from peddlers and not from retail pharmacists, and reported the prospects of satisfactory amendments to the anti-narcotic laws. After a discussion by Messrs. Gane, Arny, Mayo and others, the Secretary was directed to notify the members of the final hearing before the Legislative Committee on December 13th.

Committee on Fraternal Relations: Dr. Diner, Chairman, was not present at the meeting, but the following report was read by the Secretary:

"DR. J. LEON LASCOFF,

President N. Y. Branch A. Ph. A.

MY DEAR LASCOFF:

Owing to a pressing engagement it will be impossible for me to attend the meeting of the Branch on Monday next. I wish, however, to report on the status of the proposed joint meeting as follows:

The second meeting of the joint committee was held at the residence of Dr. J. Bentley Squires, President-elect of the New York County Medical Society, on Tuesday evening, December 5th. There were present Drs. Squires, Bastedo, Dougherty, Lascoff, Mayer, Diner and Messrs. Walter and Lehman. On motion, Dr. Diner was elected to act as chairman of the meeting.

After a considerable discussion, the following program was accepted:

The meeting is to be held on February 20, 1917, at the New York Academy of Medicine, the County Medical Society and the Branch to jointly defray the expenses of the hall. The Medical Society is to send out notices to all the medical men and the Branch to all pharmacists and pharmaceutical societies.

The following papers are to be read by the men named:

1.—"The Present Status of Professional Pharmacy," Dr. George C. Diekman.

2.—"The Physician's Need of the Professional Pharmacist," Dr. Jacob Diner.

3.—"Stemming the Tide," Dr. Walter A. Bastedo.

4.—"Facing the Future," Dr. Dougherty.

The details of the papers were then discussed at great length. It is necessary for our Branch to bestir itself and secure a large attendance of pharmacists. For this purpose, I would suggest that the Secretary of the Branch be authorized to send invitations to every pharmaceutical society in Greater New York, inviting them to attend this meeting and urging the societies to emphasize the importance of this meeting to their members. Furthermore, special announcements are to be sent to every member of the A. Ph. A., be he a member of the Branch or not. Due notice to be given to the pharmaceutical press and urging the various editors to call special attention to this meeting.

In conclusion, I wish to thank the members of our Committee for the loyal support they have given me in this work.

Respectfully yours,

(Signed) JACOB DINER.

Dr. Diner's report was accepted and ordered incorporated in the minutes.

Progress of Pharmacy: Dr. Diekman being absent, no report was rendered.

Secretary Hostmann then reported that he had attended the meeting held in memory of Martin I. Wilbert, held at the Philadelphia College of Pharmacy, as requested by the President, several of the members present adding their testimony of the life and achievements of Professor Wilbert.

President Lascoff announced the appointment of the following as a Committee on Nominations:

Charles W. Holzhauer, *Chairman*, Gustave Horstmann, Joseph L. Turner.

The Secretary read a letter from Mr. Charles

W. Holzhauer, regretting his inability to be present, particularly as he had expected to join in the discussion of the papers that were to be read.

Professor Homer St. Clair Pace presented a paper on "Accounting for Retail Pharmacists." He gave his views as to the necessity for teaching accounting to pharmacy students and outlined the course now given under his direction at the New York College.

Doctor Robert P. Fischelis read a paper on "Commercial Training for Pharmacists," dwelling chiefly on the necessity for teaching salesmanship, window dressing, etc.

Both of these papers created an extremely spirited discussion in which the general revolution taking place in all lines of education was touched upon.

JEANNOT HOSTMANN, *Secretary.*

At the January meeting of the New York Branch, the following officers were elected: *President*, Dr. Joseph L. Mayer; *Vice-President*, F. L. McCartney; *Treasurer*, Joseph Weinstein; *Secretary*, H. H. Schaefer, 115 W. 68th St., N. Y., *Member of Council*, Jeannot Hostmann.

H. H. SCHAEFER, *Secretary.*

PHILADELPHIA.

The regular monthly meeting of the Philadelphia Branch of the A. Ph. A. was held Tuesday evening, December 12th, at the Philadelphia College of Pharmacy.

President Sturmer called the meeting to order at 8.45 P.M., and the minutes of the previous meeting were read and approved.

Prof. Henry Kraemer, acting for the committee appointed at a special meeting, submitted the following report:

The passing of Martin Inventius Wilbert leaves a gap among the leaders in pharmacy that it will be difficult for us to bridge over, let alone to attempt to fill. His knowledge of the biography and bibliography of his profession was both comprehensive and thorough. He was inspired by high aspirations and honorable resolutions. His vision was unusually clear, and his perception remarkably keen as to the immediate steps that should be taken for the development of the profession of pharmacy. His honesty of purpose and absolute disinterestedness in connection with every problem and task that confronted him was the wonder and admiration of all those who came to labor closely with him. His equanimity of disposition, patience and forbearance with those who differed with him gained for him the esteem of all. He was no idle dreamer, but worked easily, methodically and steadily. He had an unusually practical mind and understood the latent powers of those with whom he came in contact, so that he could devine their half-thoughts and bring them into action. He was a pioneer, a propagandist, a diffuser of knowledge; a liberal and generous coworker. He endeavored by argument, rather than persuasion and by free and open discussion, rather than by other methods to attain the goal of his ambition which was to see a rehabilitated science and art of pharmacy established such as had been the dream of all the leaders in our profession since the dawn of American pharmacy in Carpenter's Hall in 1821. He labored in local pharmaceutical societies, the State Associations, the American Pharmaceutical Association, and even entered vigorously into the work of other organizations that he might exert a potent and beneficial influence for his adopted profession. From early youth, Mr. Wilbert was not possessed of robust health, and during the past few years, he doubtless knew that the end was not far distant, and so put into these few years all the energy he possessed. He worked incessantly and conscientiously from the springtime of his life until the autumn period, when at the age of 52, he was called to the higher and immortal life. His passing away on that bright morning of November 25th, just as the sun dispelled the mist and fogs, comes to us as a reminder of the beneficent influence of his noble nature and exalted life.

As members of the Philadelphia Branch of the A. Ph. A., we mourn the loss of one of our most useful associates and one of America's great men in pharmacy.

Resolved, therefore, on behalf of our members, that we adopt this testimonial to the memory of Martin Inventius Wilbert; and further

Resolved, that these resolutions be recorded in our minutes, and that copies be sent to his widow, Mrs. Elizabeth Wilbert, and to his parents, Mr. and Mrs. Michael Wilbert.

Dr. R. P. Fischelis moved that the report be accepted and the resolutions adopted. Motion was seconded and received a unanimous vote.

Under new business, Dr. Fischelis again brought up the question of the advisability of holding a meeting in which "The Revision of the Patent Laws" would furnish the topic of discussion, and to take steps to secure the attendance of members of other interested bodies.

Prof. Kraemer moved that a committee be appointed to arrange for such a meeting. The motion was seconded by J. Atlee Dean and passed when put to vote.

The program of the evening was then taken up, and Prof. E. Fullerton Cook read a paper on "The Syrups and Elixirs of the U. S. P. IX and the N. F. IV." Prof. Cook had samples of all the elixirs and syrups in which any change of formula had been made, and on inspection these samples brought forth interesting discussion from Messrs. Cliffe, Kraemer, Beringer, and Hunsberger.

In discussing the question "What Disposition Shall be Made of the Year Book?" the following points were emphasized:

1. The A. Ph. A. gives each member more than his dues will pay for; hence each year there is a deficit. This must be met with an increase of revenue or a decrease of expenditures. The former can be brought about only by an increase of dues; the latter most feasibly, either by discontinuing the Year Book, or publishing it in the JOURNAL from time to time.

2. The continuance of the Year Book is absolutely necessary for the progress of American Pharmacy, for it is only by the use of this and allied works that any progress is made. Were it not for this systematized and carefully indexed account of what has been done, information which can now be obtained in a few moments, would only be available after an extended time and patience consuming search through many journals. In accordance with this view, the following resolution was proposed and adopted:

Resolved, That the Philadelphia Branch go on record as favoring the continuance of the JOURNAL and the Year Book, as at present, and that any deficit which might occur be met by an increase in dues; and that further, the Secretary be instructed to send copies of this resolution to the Council and to the secretaries of the various Local Branches.

The question of increasing our membership was discussed, and the matter was turned over to the Membership Committee.

J. ED. BREWER, *Secretary*.

The regular monthly meeting of the Philadelphia Branch of the A. Ph. A. was held Wednesday, January 17, 1917, at 4 P.M., in the Auditorium of the Philadelphia Chamber of Commerce.

President Sturmer called the meeting to order at 4.20. The usual order of business was dispensed with, and the subject for discussion was taken up at once.

Dr. F. E. Stewart and Mr. Joseph W. England each presented a paper on "Proposed Revision of the U. S. Patent Laws."

Dr. C. F. Taylor opened the discussion of the papers, and said that little could be done in this direction in the medical center until medical men were brought to a better understanding of Foreign Patent Laws, U. S. Patent Laws, and proposed revision by a simplified propaganda.

Mr. Henry Blair suggested that we make an attempt to interest and to secure the coöperation of the American Chemical Society.

Messrs. Hunsberger, Dean, and Eberle also presented some valuable suggestions. At the conclusion of the discussion, the following motions were presented and passed:

1. That we are in favor of granting process patents only.

2. That we are in favor of the original patentee receiving a royalty from the holders of any subsequent patents.

3. That we are in favor of a patent law reciprocating with other nations as regards compelling a holder of a U. S. patent to manufacture his product in this country.

4. That we are in favor of extending the limit of the Paige Bill so as to include all chemicals.

5. That we are in favor of a revision of the copyright laws so as to definitely exclude generic names from the list of those copyrightable.

6. That the President appoint a committee of three to confer with the American Chemical Society concerning this important subject.

J. ED. BREWER, *Secretary*.

SAN FRANCISCO.

The San Francisco Branch of the American Pharmaceutical Association met on January 11, 1917, in the Union Square Building. President J. L. Lengfeld presided.

A communication on the question of "What disposition shall be made of the Year Book" was received from the Philadelphia Branch. The members felt that the dues should not be increased as it is rather hard to obtain new members. Both the Year Book and the JOURNAL should be continued and an extra charge be made for the Year Book or otherwise publish it in the JOURNAL.

Other topics discussed were Social Insurance as proposed in a bill now before the State Legislature, and postal regulations for sending medicines. Many claimed that Social Insurance would not improve the medical attention which the poor receive at present and would pauperize the people.

The members adjourned to meet again on the evening of February 8, 1917, and at this meeting President Lengfeld hopes to show several ancient pharmaceutical books.

CLARISSA M. ROEHR, *Secretary*.

COUNCIL BUSINESS

A. PH. A. COUNCIL LETTER NO. 9.

PHILADELPHIA, PA., November 25, 1916.

To the Members of the Council:

Motion No. 9 (*Resignation of H. P. Hynson as Member of Committee on Recipe Book*) and *Motion No. 10* (*Election of Members; Applications Nos. 22 to 30, Inclusive*) have each received a majority of affirmative votes.

Motion No. 14 (*Appropriation of $5,000 to the National Formulary Account*). Moved by J. A. Koch, seconded by W. B. Day, that $5,000 be appropriated to the National Formulary account with which to pay bills for the National Formulary IV. The appropriation is approved by the Committee on Finance. Sufficient funds have been received from the sales of the book (N. F. IV) to make the appropriation without using the general receipts.

Motion No. 15 (*Election of Members*). The following applications for membership have been received:

No. 31. Edwin Smith, Ph.G., Augusta, Kentucky, rec. by Henry Bertrams and Wm. B. Day.

No. 32. Roy Longueville Harvie, Ph.G., Augusta, Kentucky., rec. by Henry Bertrams and Wm. B. Day.

No. 33. Leon Hermann French, U. S. Naval Training Station S, San Francisco, Cal., rec. by A. A. Lee and Wm. B. Day.

No. 34. Henry Clifford Colson, Jr., 2809 Mt. Holly St., Baltimore, Md., rec. by H. Englehardt and Charles C. Neal.

No. 35. Chas. Marion Bandel, 1331 California St., San Francisco, Cal., rec. by J. L. Lengfeld and Clarissa M. Roehr.

No. 36. Sidney Ormon Barnstead, New Lebanon, New York, rec. by J. L. Hopkins and J. W. Cox.

No. 37. James Clarence Palmer, 4703 18th Avenue Northeast, Seattle, Wash., rec. by F. Edith Hindman and F. J. Goodrich.

No. 38. Philip F. Fackenthall, Medical College of Va., Richmond, Va., rec. by Wortley F. Rudd and Albert Bolenbaugh.

The following communications have been received:

Mr. Harry B. Mason writes: "I have reread Council Letters Nos. 4 and 6 with reference to the Committee on the National Formulary. There seems to be more or less confusion in the minds of members on this subject, and I think the whole situation could be straightened out very easily. It is clear to my mind that Professor Diehl's resignation from the chairmanship still left him as a member of the committee, and that the motion for the election of Dr. Fantus was, therefore, out of order. It is equally clear that there was no necessity for Professor Snow's motion to elect Professor Scoville to the chairmanship of the committee. Professor Scoville is already acting chairman and has been for a year or two.

"As a matter of fact, the Council voted at the Atlantic City meeting to continue the present committee until 1919, at which time it was proposed that the A. Ph. A. would appoint a new committee for the purpose of bringing out the next revision of the book. The present committee was held over for another three years merely that it could correct any errors in the present revision and in order that it could issue a quinquennial supplement. Hence we find this situation—that a committee is already in existence, that there are no vacancies in its membership, and that it has an acting chairman, and that it is to remain as it is until 1919. I would be in favor of voting for Mr. Beringer's motion that the present status quo be continued except that it is entirely superfluous. Likewise superfluous and premature is any talk about either the chairmanship of the next committee or the personnel of its members.

"If deemed necessary, a vote might be taken on the motion to elect Professor Scoville to the actual chairmanship of the present committee, but he really holds what amounts to that office already. And as for nominating him or anybody else for the next committee that seems to be a matter that cannot be taken up until 1919 unless the Council reverses itself in the meantime. Therefore, it seems to me that all this discussion is entirely beside the mark. As Josh Billings would say, 'we are talking about a lot of things that ain't so.'"

Lucius E. Sayre writes: "I am very much interested in Motion No. 12 (Fund for Proposed A. Ph. A. Home). As to the *name*, I would object to the title 'Home,' and I do not altogether like that of 'Building.' I should prefer 'The Pharmacists' Headquarters' or 'Center,' 'Publication Offices,' or some such title. However, this title is a matter of detail which may be settled upon in the near future. It should be decided soon, however, in order to aid the soliciting committee.

"Permit me to say: I am inclined to the opinion: this is a very hard time to raise funds, as there are so many appeals at this time for the relief of distress on account of present European conditions. I find it difficult to finance similar projects here in the Middle West on this account. Nashville is not an ideal center."

E. G. Eberle writes: "Replying to Council Letter No. 6, Motion No. 12: While the Association has taken no specific action relative to a permanent home, the status of the question may be viewed in the light of unfinished business. 'The offer of Nashville was received and placed on record for future consideration.' The proposition has not been disposed of.

"I believe the members of the Association are hopeful that at some time, and the sooner the better, they will have a home; they have a desire for a home if means can be provided to secure it and utilize the home advantageously. It is a question of finance.

"I think Dr. Whelpley, the mover of the motion, should give us a little further explanation so that the members of the Council may know what the prospects of success are. Reading between the lines, evidently encouragement has been given in some way and, if this is the case, I am sure the members would be pleased to hear the good news with such instructions as may be necessary for their guidance so that they may render assistance in the movement. Final approval of the committee's work and recommendation will come before the Association.

"If. Dr. Beal will consent to accept the appointment, should the committee be authorized, he will make no mistake in selecting his associates. No comment need be made relative to the quality of work that may be expected from this committee, if appointed; the name of the chairman implies that it will be done with utmost care and efficiency.

"Relative to the status of Prof. C. Lewis Diehl, I think that Mr. Wilbert's point is well taken and that Prof. Diehl continues a member of the committee. I consider that the work of the National Formulary Committee on N. F. IV is not completed, but I do not think it necessary to elect a chairman at this time. My idea would be to permit the committee to hold over just as constituted last year. I realize that the work of the committee has practically been completed but there may be some questions to answer that this committee as such could best handle. I, therefore, favor that the committee remain as it now is."

President Wulling writes relative to fund for proposed A. Ph. A. headquarters: "My own idea in the matter was to recommend a small, but strong, committee, the committee to have power to appoint sub-committees if it thought wise for a geographic covering of the country; that the fund to be secured be not less than a half million dollars; that half of that sum be employed in the erection and equipment of a substantial, fire-proof, steel-furniture equipped building that would afford ample facilities for the many activities in which the Association should engage; that the remaining quarter million dollars be used as an endowment, the income of which be used for administration purposes. No doubt many of our friends will think such a sum entirely too large, but, personally, I would rather set the mark at an even million dollars. I believe with the proper organization and energy a million could be collected as easily as half a million.

"Several weeks ago I began seeking information concerning the total number of persons engaged in retail, wholesale, manufacturing, jobbing and related pharmaceutical activities. I have also made inquiries looking to an approximate estimation of the total capital invested in the United States in pharmaceutical activities of all kinds. I believe a million dollars would be a very small assessment on this capital and would be one of the very best investments that American pharmacy could make. In a matter like this we will have to get away from the too universal habit of thinking in terms of ten cents."

George M. Beringer writes: "I have noted with interest Motion No. 12 offered by Dr. H. M. Whelpley. On this motion, however, I offer the following comment: First, I must take exception to continuing the use

of "A. Ph. A. Home." This inappropriate title for what we have in mind, A. Ph. A. headquarters, should not be officially continued in the records and discussions of the Association. Further, as this subject is one of great importance to the Association and may have a very decided effect on the plans and future work of the organization, it should receive the most careful consideration of the entire membership.

"Before a committee proceeds to raise funds for any purpose, the scope of the purpose and application of the money should be thoroughly defined.

"In my presidential address of two years ago (See Journal of the A. Ph. A., 1914, p. 1229), I pointed out the necessity for determining the scope of the work and the outlining of a comprehensive plan based on well defined ideas as to the actual needs of the Association and the field of work which it is contemplated to engage in through the establishment of an A. Ph. A. Headquarters. Any extension of the work of the A. Ph. A. will entail an increase in the expense of the management and so an ample endowment fund must be provided to insure the income necessary.

"The motion offered is, in my judgment, not sufficiently definite in its direction to the proposed committee. I am heartily in accord with reviving this project and formulating a comprehensive plan. I would like to see the motion modified so as to cover the object, scope and financial plan as well as the funds needed. Hence, I offer as a substitute motion:

"That Dr. James H. Beal be appointed chairman of a special committee, that he is to select, to consider the project for establishing an A. Ph. A. Headquarters; to report to the Association a comprehensive plan covering the scope of the work contemplated through such an agency; a plan for its permanent management; and also a statement as to the amount of endowment fund that will be necessary to provide for sufficient income for this purpose so that the financial support of the project will be assured."

The above motion is seconded by Dr. F. E. Stewart. It will be known as *Motion No. 16* (*Substitute Motion for Motion No. 12*). The motions is open for discussion. A vote will be called for later.

Very truly yours,

J. W. ENGLAND,
Secretary.

415 N. 33RD STREET.

A. PH. A. COUNCIL LETTER NO. 10.

PHILADELPHIA, PA., November 22, 1916.

To the Members of the Council:

At the request of President Wulling, the following correspondence is submitted:

CHAPEL HILL, N. C., NOV. 10, 1916.

PRESIDENT F. J. WULLING,
American Pharmaceutical Association,
University of Minnesota,
Minneapolis, Minn.

DEAR SIR:

It is understood that in the early part of December, President Wilson will probably announce the appointees to the Tariff Commission created at the last session of the present Congress.

The Directors of the American Chemical Society deem it very important that at least one member of the Tariff Commission should be a man who has had chemical training, at the same time one who has had experience in commercial matters, and whose attitude towards the chemical industries will be broad-mindedly sympathetic.

From these standpoints, the Directors have agreed to recommend to President Wilson the appointment of Mr. Elwood Hendrick, of New York City.

Since chemistry and chemicals enter largely into so many other lines of manufacture, it has seemed to us extremely important to secure the coöperation of as many kindred organizations as possible in this recommendation of Mr. Hendrick.

I beg, therefore, to express the hope that you will take up this question preferably by wire, with your Directors or Executive Committee and join us in this movement.

For your information, I take pleasure in enclosing herewith a brief biographical sketch of Mr. Hendrick.

Trusting to hear from you at the earliest opportunity,

Very sincerely yours,

CHAS. H. HERTY,
President.

ELWOOD HENDRICK.

Born in Albany, N. Y., 1861, of English, Irish and Scotch descent.

Politics—Republican. Residence in New York City. Married 1897, 2 children.

Education—Boys' Academy of Albany and Public High School, Albany. Entered University of Zurich, Switzerland, 1878, studied chemistry, organic and inorganic, under Victor Meyer and Merz and Veith; returned

to Albany 1881; Assistant Superintendent and finally Superintendent Albany Aniline and Chemical Works until change in ownership in 1884. Came to New York City in 1884, became Assistant Cashier and then Surveyor for Commercial Union Assurance Company; contributed many articles on relation of chemistry to fire insurance in "Weekly Underwriter," "Chronicle" and other fire insurance publications; used many endeavors to establish a scientific basis for fire insurance inspections; in 1890 became Special Agent for Commercial Union Assurance Company in the South, representing them in various territories and thereby became intimately acquainted as Fire Insurance Special Agent with many industries east of the Mississippi and North of Gulf of Mexico up to New England, to wit, those in the following 14 states:

Georgia, North Carolina, South Carolina, Florida, Alabama, Virginia, West Virginia, Maryland, District of Columbia, New York, Maine, New Hampshire, Massachusetts (Springfield, East), and Rhode Island.

This lasted for ten years, or up to May 1900.

In May 1900, became associated with Pomeroy Brothers, brokers and dealers in investment securities in New York City.

January 1, 1916, retired from active business and addressed himself to the popularization of chemistry and also as editorial writer in various periodicals, more particularly in regard to chemistry as applied to industries; has been Vice-President of the Chemists' Club at New York for two terms and for many years a trustee of that Club; has occupied committee positions on behalf of the American Chemical Society. Has been director of the American Tube and Stamping Company of Bridgeport, Conn., Tariffville Oxygen & Chemical Company and Vice-President of Price-Campbell Cotton Picker Corporation.

Incidentally he has contributed numerous essays to the "Atlantic Monthly" and other periodicals. Has lectured before the Departments of Chemistry of the College of the City of New York, Columbia University and the Mellon Institute of Pittsburgh on relation of Science to the Humanities.

Clubs—Players, Chemists' and Century.

MINNEAPOLIS, MINN., Nov. 14, 1916.

DR. CHARLES H. HERTY, Pres. A. C. S.,
Chapel Hill, N. C.

MY DEAR SIR:

This will acknowledge your letter of November 10th in the matter of the recommendation of appointment of Mr. Elwood Hendrick, of New York City, as a member of the Tariff Commission. I will forward your letter and the brief biographical sketch of Mr. Hendrick, which you sent me, to the Secretary of the Council, with the suggestion that the matter be brought to the attention of the Council. Personally, I hope that chemistry and the allied interests will be represented on the Tariff Commission.

Very sincerely yours,

FREDERICK J. WULLING, *Pres. A. Ph. A.*

Do you favor coöperation with the American Chemical Society in recommending to President Wilson the appointment of Mr. Elwood Hendrick of N. Y. City, as a member of the Tariff Comm.?

This will be known as *Motion No. 13* (*Recommendation of Mr. Elwood Hendrick as Member of Tariff Commission*).

Very truly yours,

J. W. ENGLAND, *Secretary.*

415 N. 33RD STREET.

P. S.—Please return voting cards within 5 days.

MEMORANDA.

The following is submitted:

A. Ph. A. Membership Losses to Nov. 18, 1916.

Resigned since Oct. 18, 1916.

McKee, E. S., Cincinnati, Ohio.
Strasenburgh, J. H., Rochester, N. Y.

Suspended since Oct. 18, 1916

Nudd, B. F., Residence unknown.
Elkin, W. S., Jr., Atlanta, Ga.
Evans, Leon, Mayfield, Ky.
Jensen, C. A. B., Butte, Mont.
Colle, Bernard, New York, N. Y.
Wagner, J. L., Dayton, Ohio.
Bradley, F. E., Noble, Okla.
Brunk, L. D., Jr., Nowata, Okla.
Daily, A. D., Sherman, Texas.
Drach, C. D., Jeannette, Pa.
Ryer, J. S., Buffalo, N. Y.
Rogoff, J. M., Cleveland, Ohio.
Liebmann, Elias, New York, N. Y.
Rogers, B. I., Solon, Iowa.
Posey, H. G., New Orleans, La.
Easly, J. J., Hastings, Pa.
Raycraft, J., Monticello, Ill.
Melcher, Geo., Morgantown, W. Va.
Oxman, H. H., New York, N. Y.
Schwerdtmann, T. R., St. Louis, Mo.

The deaths are reported each month in the JOURNAL OF THE A. PH. A.

2152 paid dues for 1915.
2204 have paid dues for 1916.
203 have paid dues for 1917.

H. M. WHELPLEY, *Treasurer.*

EDITORIAL NOTES

Editor: E. G. EBERLE, Bourse Building, Philadelphia, Pa.

Committee on Publication: J. W. ENGLAND, *Chairman;* G. M. BERINGER, CASWELL A. MAYO, H. B. MASON, and the Editor-in-Chief of the Journal, General Secretary, Treasurer and Reporter on the Progress of Pharmacy, *ex-officio.*

Office of Publication, 253 Bourse Building, Philadelphia, Pa.

ENDOWMENTS.

Medical colleges are being remembered with large endowments, dental schools have not been neglected, and while a few schools of pharmacy have been favored, there are many more institutions entitled to such recognition. Institutions that have for years provided pharmaceutical education certainly have contributed toward the upbuilding of pharmaceutical and chemical industries, and financial encouragement should come to them as a reward for their valuable and faithful service, but still another motive may rightfully prompt such endowments, namely, to enable these institutions to carry on their work in accord with modern demands.

Extended mention was made in last month's issue, page 102, of the generous gift of Mr. George Robert White to the Massachusetts College of Pharmacy. Pharmacy, at large, appreciates this recognition of an institution, educating pharmacy students, and it is to be hoped that the example set will persuade others to do likewise; some to give thought to the fact that their success has been somewhat due to one or the other or all pharmacy schools, and that a gift to one or the other institution will speak for their appreciation and interest.

What has been said of the work of schools is applicable in a way to the American Pharmaceutical Association. To place this organization beyond the constant worry for sufficient funds in carrying on its mission and good work, and to extend it, would be a fitting recognition of the services rendered and place the Association in a position to utilize its opportunities in a wider field of activity. The work of the American Pharmaceutical Association speaks for itself, and those who have given of their time and energies have also been among the most generous supporters in a material way.

THE COMMITTEE ON DRUG REFORM.

Chairman L. E. Sayre is actively continuing his work and has issued a letter from which abstracts are presented. Doubtless there are many who can be helpful in promoting the work of this important committee. He refers to the report presented at the Atlantic City meeting, which is printed in the JOURNAL A. PH. A., p. 1237, and continues by saying:

"It seems to me that this next Committee should take, first, a recognition of one fact in particular, namely, that Professor H. H. Rusby has been obliged to resign his position in New York as inspector on account of not having what he feels to be a fair chance to inspect imported drugs. I think you will find the statement in the January issue of the *Druggists' Circular*.

"Second—Permit me to call the attention of the present Committee to the problem of patent medicines, with reference to their proper control. Is it possible to suggest any method looking toward this?

"If patent medicines are to be legally recognized, it would seem unfair to ask a state analyst to go to the trouble and expense of *analyzing* these various products or preparations of this class as they drift into the market. It ought to be possible to require of the manufacturer who has the privilege of their sale to submit a confidential formula, at least to the proper authorities. The analyst should only be called upon to *verify* the alleged ingredients.

"Should not a properly organized committee be created to decide upon the question of the reliability of the statements on label and circulars of patent medicines?

"It may be unwise for any state board of health, state pharmaceutical association, or even a committee composed of members selected from each, to decide the question of trustworthiness, but should not the combined effort of the boards of health and state pharmaceutical associations be directed to the problem? Should they not make some move toward *national legislation* for the approval of the A. Ph. A.—leading to the proper solution of this problem?"

In concluding, Chairman Sayre refers to the article by Dr. J. H. Beal printed in the November issue of the JOURNAL A. PH. A.,

p. 1251, on "A Plea for Sanity in Drug Regulation."

LETTER OF SECRETARY JOSEPHUS DANIELS.

The following letter will interest the members of the American Pharmaceutical Association:

"Your esteemed favor of November 6th arrived at a time when I was so completely occupied with contracts for a large number of vessels authorized at the last session of Congress, that I was unable to give attention to my personal mail, and, while I thought I had acknowledged the receipt of your letter and expressed my appreciation of the Association's action, it appears that I have overlooked doing so.

"I am gratified to receive the approval of the Association for my action in this matter. The Navy is very proud of its official corps of Hospital Stewards, and I was very glad to assist in bettering their opportunities.

Cordially yours,

(Signed) JOSEPHUS DANIELS."

W. B. Day, Esq.,
General Secretary, A. Ph. A.,
701 South Wood St.,
Chicago, Ill.

This letter was written in response to one from the American Pharmaceutical Association and in recognition of Secretary Daniel's interest in behalf of pharmacists in the Government service (see p. 884, August issue of the JOURNAL A. PH. A., and also p. 1038, October number).

BILL FOR RELIEF OF PHARMACISTS IN PUBLIC HEALTH SERVICE.

Chairman S. L. Hilton advises that the following bill to fix the pay and allowance of pharmacists in the Public Health Service has the approval of the Surgeon-General and is satisfactory to the men in the service. Encouragement should be given the measure and members should use their influence with Senators and Congressmen in its behalf. The measure is entitled:

A BILL.

To fix the pay and allowance for the pharmacists of the Public Health Service.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the pay of the pharmacists of the Public Health Service shall hereafter be at the following annual rates: For pharmacists of the third class, $1200; for pharmacists of the second class, $1400; for pharmacists of the first class, $1600; and pharmacists of the first and second classes shall receive an additional compensation of ten per centum of their annual pay for each five years of service; such additional compensation, however, shall in no case exceed forty per centum.

Section 2. That pharmacists, when on duty at marine hospitals and quarantine stations, shall be entitled to quarters with furniture, fuel, and lights; and when they are on duty at stations where quarters are not furnished them, they shall receive compensation therefor at the rate of $25 a month; and the allowance of subsistence is hereby abolished.

Section 3. That pharmacists may be placed on waiting orders when they are incapacitated for active duty by reason of age or illness not caused by their own vicious habits. A pharmacist having been on waiting orders longer than two months shall thenceforth, as long as he shall be on waiting orders, receive three-fourths of the pay to which he was entitled at the time when he was placed on waiting orders.

OBITUARY.

FRANK H. SHURTLEFF.

Frank Hamilton Shurtleff, of Roslindale, Mass., passed away December 2, 1916, after only a few days' illness. Mr. Shurtleff had been in poor health for a year. He was born in Somerset, near Fall River, Mass., fifty years ago. After graduating from the schools in Somerset he came to Boston and his early training as a druggist was obtained with Folger & Co., Washington St. and Worcester Sq., Boston, which was then the best part of the city. In his later years he went to California, and in 1909 J. G. Godding engaged him and he held the position as manager of the Dartmouth street store. He was a graduate of the Massachusetts College of Pharmacy and a member of the American Pharmaceutical Association (1914), and a member of the Episcopal Church.

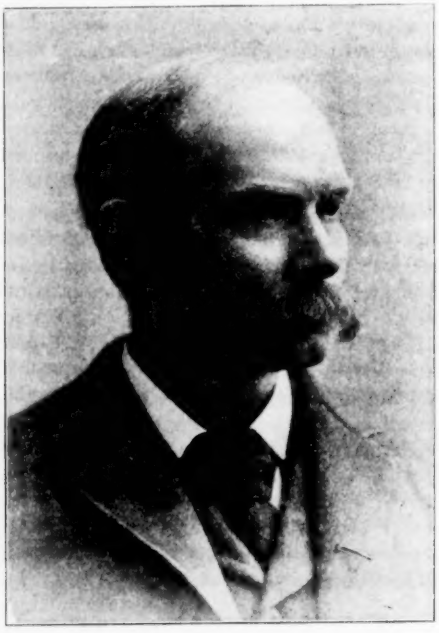
He leaves a widow, two daughters, and a son, a brother and sister.

A. C. WAGNER.

N. GRAY BARTLETT.

Nicholas Gray Bartlett, one of the pioneer druggists of Chicago, died on Thursday, January 4, 1917, aged 77 years.

Nicholas Gray Bartlett came to Chicago in 1861 from Louisville, Kentucky, his native city. He had previously served an apprenticeship with J. L. Morris & Sons, of Louisville, and had been for a time a student in the Kentucky School of Medicine. Upon his arrival in Chicago, he entered the employ of E. H. Sargent and matriculated at the Chicago College of Pharmacy. The closing of the school on account of the Civil War prevented young Bartlett from completing the course.



N. GRAY BARTLETT

He left Chicago in 1866 and became associated with his brother in the drug business at Keokuk, Iowa. Upon his return to Chicago in 1870, he was chosen professor of chemistry in the Chicago Medical College and shortly afterward was elected professor of chemistry in the Chicago College of Pharmacy and Editor of the *Pharmacist*, a monthly journal published by the college. During his connection with the Chicago College of Pharmacy, extending from 1867 to 1895, he occupied at various times the chairs of chemistry and of pharmacy; served as trustee and three terms as president of the institution and was one of the leading spirits of the management of its affairs. Professor Bartlett resigned from the faculty of the school in 1895, much to the regret of his colleagues.

When the Chicago College of Pharmacy was taken over by the University of Illinois in 1896, the University, upon the request of the faculty of the school, conferred upon Professor Bartlett the honorary degree of Master of Pharmacy.

Professor Bartlett established himself in the drug business at 22nd St. and Indiana Ave., Chicago, in 1872, and conducted a pharmacy at that location continuously for more than forty years.

He is survived by two sons, Allyn and John Bartlett.

Professor Bartlett joined the American Pharmaceutical Association in 1864 and afterward became a life member.

Professor Bartlett was a representative of the best type of old-time pharmacists—exceedingly careful and conscientious in his work. He enjoyed the confidence of some of the best-known physicians in Chicago and the patronage of the wealthy people who at one time resided on Michigan Avenue and Prairie Avenue in the neighborhood of his store. With changing conditions this neighborhood of fine homes gave way before the inroads of business and Professor Bartlett could not adapt himself in his later years to the changed surroundings. In fact, he had little taste for commercialism and preferred to add to his income by analytical work and in this he was very expert. He continued this work up to a few months before his death and during the past five years had given much of his time to the manufacture of a dental cement. As a teacher, Professor Bartlett showed the same interest and care that characterized his work as a pharmacist. While he never sought popularity among the students, his classes always had the greatest respect for him and appreciated his ability as a lecturer. His passing leaves another gap in the ranks of the old-time pharmacists who were engaged in the drug business in Chicago before the great fire and those who were so active in the founding and promoting of the old Chicago College of Pharmacy which afterward became the School of Pharmacy of the University of Illinois.

W. B. DAY.

A. D. THOMPSON.

Albert Delano Thompson, president of the A. D. Thompson Drug Company, Minneapolis, and the Howard Chemical and Manufacturing Company, died recently from apoplectic paralysis. Mr. Thompson was born in St. Stephen, N. B., in 1861 and went to Minneapolis in 1866. He entered the drug business as an employe of the Gray & Hofflin Drug Company. Later the company was changed to the Hofflin-Thompson Drug Company and in 1899 to the A. D. Thompson Drug Company, which operated several retail stores. Mr. Thompson was twice president of the Minneapolis Retail Druggists' Association and once president of the Minnesota Pharmaceutical Association.

Mr. Thompson joined the American Pharmaceutical Association in 1895.

The following resolutions were adopted by the Minneapolis Retailers' Association:

"The Minneapolis Retailers' Association has long recognized and held in high regard the good citizenship of A. D. Thompson and the public spirited interest which he manifested in all matters pertaining to the welfare and progress of Minneapolis;

"He had long been one of the most honored members of this association and had taken an active and interested part in its achievements;

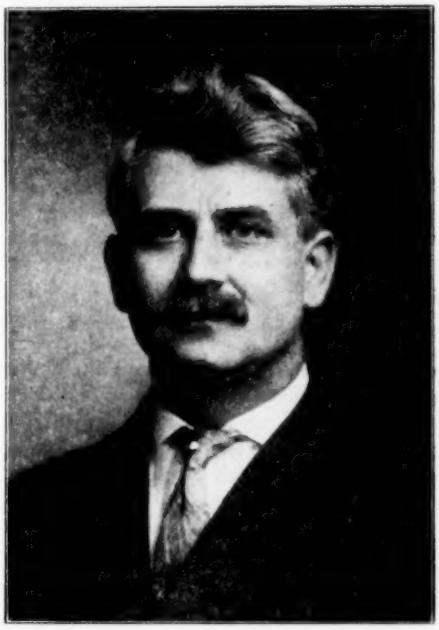
"In the breaking by death of the friendly ties that have long bound the members of this association to A. D. Thompson, the Minneapolis Retailers' Association has suffered a distinct loss that will be long felt and deeply deplored.

"The Minneapolis Retailers' Association extends its sincere sympathy to the family of A. D. Thompson in the sad bereavement, and to his many friends in their sorrow."

B. S. COOBAN.

Benjamin Slater Cooban, a prominent druggist of Englewood, Chicago, died December 31, after a two months' illness of diabetes.

Mr. Cooban was born at Petroleum Center, Pa., in 1866 and after serving an apprenticeship with H. C. Sanderson of Bradford, Pa., came to Chicago in 1888 and enrolled in the Chicago College of Pharmacy, from which he was graduated in 1889. Since 1892, Mr. Cooban conducted a successful drug store at 459 W. 63rd Street.



B. S. COOBAN

He was a member of the Illinois Pharmaceutical Association, Chicago Retail Druggists' Association and of the American Pharmaceutical Association since 1902.

He leaves a father, widow and son; the latter, Frank G. Cooban, attended the University of Illinois College of Pharmacy last year and is a registered assistant pharmacist.

W. B. D.

SOCIETIES AND COLLEGES.

MEETING OF THE NATIONAL DRUG TRADE CONFERENCE HELD AT THE NEW WILLARD HOTEL, WASHINGTON, D. C., JANUARY 16, 1917.

FORENOON SESSION.

The President, John C. Wallace, called the meeting to order at 10.25 A.M.

The roll being called, disclosed the following delegates present. Representing the American Pharmaceutical Association:

John C. Wallace, of New Castle, Pa.; S. L. Hilton, Washington, D. C.; J. H. Beal, Urbana, Ill.

Representing the National Wholesale Druggists' Association:

F. E. Holliday, New York City, alternate for Charles A. West, Boston, Mass.; C. Mahlon Kline, Philadelphia, Pa.; George W. Lattimer, Columbus, Ohio.

Representing the National Association of Retail Druggists:

Samuel C. Henry, Philadelphia, Pa.; James F. Finneran, Boston, Mass.; Eugene C. Brockmeyer, Washington, D. C.

Representing the American Association of Pharmaceutical Chemists:

J. Fred Windolph, alternate for R. Stofer, Norwich, N. Y.; George C. Pratt, Philadelphia, Pa., alternate for Dr. W. C. Abbott.

Representing the National Association of Manufacturers of Medicinal Products:

Charles J. Lynn, Indianapolis, Ind., alternate for Adolph G. Rosengarten, Philadelphia, Pa.; Dr. A. R. L. Dohme, Baltimore, Md.; Charles M. Woodruff, Detroit, Mich.

Representing the Proprietary Association of America:

Fred K. Fernald, of Elkhart, Ind.

Prof. James H. Beal then gave notice of certain proposals to amend the Code of Rules and Regulations and that he would move their adoption at the afternoon session. For proposals see minutes of afternoon session.

The following report of the Executive Committee was then read:

REPORT OF EXECUTIVE COMMITTEE.

To the Members of the National Drug Trade Conference:

Your executive committee begs to report that it held a meeting at the New Willard Hotel in Washington, D. C., Monday, January 15, 1917, at which were present the Chairman, John C. Wallace, the Secretary, Charles M. Woodruff, George W. Lattimer, James F. Finneran, J. Fred Windolph, representing R. C. Stofer and A. R. L. Dohme.

The Secretary-Treasurer then read his financial report, which was approved.

The adoption of the following resolutions by the Conference were then duly recommended:

Resolved, That each constituent organization be requested to pay an assessment of $50 for the expenses of the Conference. To amend Section 8 of the Harrison Law.

WHEREAS, Various amendments to the Harrison act have been suggested, many of them imposing heavier burdens upon the drug trade than are made necessary by any purpose of the law; and

WHEREAS, The act has been as effective as any law could reasonably be expected to be, and any further burden upon the drug trade would be unjust and oppressive; therefore, be it

Resolved, That we petition Congress not to amend the Harrison act in any other respect than the following:

Resolved, That Section 8 should be amended so as to read in part as follows:

Section 8.—It shall be unlawful for any person not registered under the provisions of this act and who has not paid the tax provided for by this act, to offer for sale or have in his possession for sale or under his control for sale, any of the aforesaid drugs, and possession or control by any person who has not registered under the provisions of this act, and who has not paid the special tax provided by this act, shall be prima facie evidence of a violation of this provision whether such person is a person enumerated in Section 1 of this act or not; provided, etc., as in Section 8 of the Harrison act.

Resolved, That the Conference approve of the recommendation made by the Commissioner of Internal Revenue in 1915 that some provision be made for the treatment of indigent persons unfortunately addicted to the use of narcotic habit-forming drugs where the operation of the law brings about conditions necessitating such treatment, but believes this to be a function of the State and not of the Federal Government; and that care should be exercised in such institutions to unduly exploit the law to their own pecuniary advantage.

Resolved, That recognizing the importance of the subject of compulsory health insurance and the evils of hasty and ill-considered legislation passed upon the initiative of bodies organized to promote such legislation; often *ex parte* as it were; this Conference earnestly recommends to the legislators of the various States in which bills for compulsory health or other compulsory social insurance may be introduced, that such bills be not passed for the present; but, instead that commissions be appointed of impartial men not committed on the subject to investigate the whole question from every angle; to give all interested an opportunity to be heard and finally to report their conclusions to the next sessions of their respective legislatures.

Resolved, That the president appoint a committee of three to draft suitable resolutions on the death of the late Dr. M. I. Wilbert.

KERN-DOREMUS BILL INDORSED.

Resolved, That the Conference unanimously

indorse the Kern-Doremus bill as the only adequate measure to give relief to art, industry and science respecting the mailing of legitimate articles, which though poisonous or containing poisons, are not outwardly or of their own force dangerous to life, health or property, and may be mailed with entire safety.

Resolved, That the meetings of this Conference be closed, to the end that delegates may feel greater freedom in discussion; provided, however, this resolution shall not prevent the Conference from admitting any person upon unanimous consent of all delegates present.

WHEREAS, The Revision Committees of the United States Pharmacopoeia and the National Formulary have established standards based upon the experience and improvements of pharmacists for all important drugs for which standards are desirable; and

WHEREAS, Custom has established standards for all important food products which are now generally recognized by laws, rules and regulations in various States; and

WHEREAS, Attempts to establish standards for other foods and drugs will tend to discourage initiative, research and improvement on the part of producers and manufacturers; therefore be it

Resolved, That the National Drug Trade Conference respectfully protest against the establishment of arbitrary standards for foods and drugs beyond those already made; and especially against attempts to establish standards for articles originally devised and introduced by producers and manufacturers, and for which such producers and manufacturers have already established standards based on their experience.

Resolved, That the Conference approve the passage by Congress of H. R. 18986, House Calendar No. 217, provided the same be amended by inserting after the word "liquors" in line nine, page one, the words, "or a manufacturer of or dealer in medicinal or toilet preparations, flavoring extracts or chemicals."

Resolved, That the Conference recommend the general adoption of the metric system as soon as practicable.

Resolved, That the president appoint a committee of three to inquire into and report as to whether the word "aspirin" will become public property after the expiration of the Hoffman patent on acetyl salicylic acid, and that the secretary-treasurer be authorized to pay the reasonable cost of such inquiry.

After reading these resolutions as a whole they were then taken up separately, discussed, and in due form adopted.

The President appointed Dr. A. R. L. Dohme, Prof. James H. Beal and Mr. S. L. Hilton the committee to draft resolutions on the death of Dr. M. I. Wilbert.

The President appointed Dr. A. R. L. Dohme, Mr. C. Mahlon Kline and Mr. Samuel C. Henry the committee to investigate and report on the aspirin situation.

A committee on nominations was also appointed by the President.

AFTERNOON SESSION.

The afternoon session was called to order at 3 P.M., all officers and delegates who had reported at the morning session being present.

Moved by Dr. J. H. Beal, seconded by Mr. C. J. Lynn:

To amend the third section or paragraph of Rule 2 to read as follows: "Duly appointed representatives of medical or pharmaceutical organizations not members of the Conference, or other persons, may be granted the privilege of the floor by vote."

"All votes for the admission of new members, or granting the privilege of the floor, and all discussions relating thereto shall be had in executive session."

To amend Rule No. 6 to read as follows: "The Conference shall hold one regular annual meeting in Washington at a time to be designated by the President, and such additional meetings as may be provided for."

"Special meetings may be called by the President at any time, and shall be called when so ordered by the Executive Committee or when so requested in writing by five duly appointed delegates. Except in case of emergency, not less than ten days' notice in writing shall be given of the time and place of all regular or called meetings."

To amend Rule 5 by adding the following: "Special committees shall be appointed by the chair unless otherwise provided for by motion."

Carried.

Moved by J. H. Beal, seconded by Mr. Finneran that the Code of Rules and Regulations as amended be rearranged under appropriate headings as follows:

Bring together Rules No. 1 and No. 3 under the heading "Section One—Name and Object."

Give to Rule 2, as amended the heading, "Section Two—Members and Delegates."

Assemble Rule No. 4 and Rule No. 5 as

amended under the head, "Section Three—Officers and Committees."

Give to Rule No. 6 as amended the head, "Section Four—Meetings."

Assemble Rules No. 7, No. 8 and No. 9 under the head of "Section Five—Rules of Order and Amendment."

Carried.

The Nominating Committee then reported the following nominations:

For *President*, John C. Wallace.

For *First Vice-President*, Samuel C. Henry.

For *Second Vice-President*, Dr. W. C. Abbott.

For *Third Vice-President*, C. Mahlon Kline.

For *Secretary-Treasurer*, Charles M. Woodruff.

On motion, duly seconded and carried, the ballot of the Conference was cast by the Secretary for the above named candidates and they were duly declared elected.

The following members of the Executive Committee were then duly nominated from the floor and elected by ballot: James H. Beal, George W. Lattimer, James F. Finneran, R. C. Stofer, A. R. L. Dohme, Fred. K. Fernald.

F. E. Holliday then read the report of the Board of Control of the National Wholesale Druggists' Association on the report of the Committee on Prevention of Adulteration, and, after considerable discussion, it was moved, seconded, put to vote and carried that the Conference approve of the report and give its support to the National Wholesale Druggists' Association's efforts to secure publicity and uniformity of standards by which the Department of Agriculture determines what drugs shall be admitted to the country under the Food and Drugs Act, and what shall not; and to secure appeal to the courts.

To this end Dr. A. R. L. Dohme, C. Mahlon Kline and Eugene C. Brockmeyer were appointed a special committee.

The Special Committee on Interpretation and Enforcement of Food and Drug Laws, reported progress, and on motion, duly seconded and carried, was continued with instructions to report at the next annual session of the Conference.

The Special Committee appointed at the last annual meeting of the Conference to report on Section 8 of the "Minimum Requirements with which Proprietary Remedies Should Comply in Order to Render Them Safe for Direct Sale to the General Public" as adopted by the American Pharmaceutical Association reported and recommended that Section 8 be approved with certain eliminations leaving it to read as follows:

Section 8—*Incurable Diseases.*—The preparation must not be advertised or recommended as a cure for diseases or conditions which are generally recognized as incurable by the simple administration of drugs.

Report accepted and recommendation adopted.

Mr. Crause reported that he had seen Congressman Randall, author of H. R. 18986 to exclude alcoholic liquor advertising from the mails, and that Mr. Randall had accepted the amendment proposed at the morning session by the Conference, and thanked the Conference for its assistance.

Charles J. Lynn moved that the Executive Committee be instructed to secure a regulation effecting the keeping of proper records of Harrison Act drugs exported, provided the Committee did not find that such regulation already existed.

Seconded and carried.

Charles J. Lynn moved the matter of the Conference joining the United States Chamber of Commerce be referred to the Executive Committee with power to act.

Seconded and carried.

On motion the Conference then adjourned to meet at the call of the President.

CHARLES M. WOODRUFF, *Secretary.*

THE METRIC CONFERENCE.

The Metric Conference, which was held in New York on December 27th, resulted in the organization of the American Metric Association which will inaugurate a campaign of education among commercial bodies leading eventually to the adoption of metric units in this country.

The Conference opened on the morning of the twenty-seventh at a sitting of the Section on Social and Economic Science of the American Association for the Advancement of Science which was presided over by Dr. George F. Kunz, of New York, while Professor Seymour C. Loomis, of New Haven, acted as secretary.

At this session, the following papers were read:

1. "The Advisability of Adopting the Metric Standard of Weights and Measures in the United States," by George F. Kunz, Ph.D., Retiring Chairman of the Section.

2. "The Metric System from the Standpoint of Electrical Engineers," by Arthur E. Kennelly, Sc.D., A.M., of Harvard University and the Massachusetts Institute of Technology.

3. "The Metric System from the Pan-American Standpoint," by William P. Wells, LL.B., of the Pan-American Union, Washington.

4. "The Metric System in Everyday Life," by H. V. Arny, Ph.D., of Columbia University.

5. "The Metric System from the Standpoint of the Wholesale Grocers and Canning Industry," by Fred. R. Drake, M.A., Ex-President of the National Wholesale Grocers' Association, Easton, Pa.

6. "The Metric System from the Standpoint of the Government," by H. D. Hubbard, Ph.D., Secretary of the Bureau of Standards, Washington, D. C.

7. "The Wholesale Druggists and the Metric System," by A. W. Miller, M.D., Chairman of the Metric Committee of the National Wholesale Druggists' Association, Philadelphia.

8. "The Use of Educational Apparatus Based on Metric Units," by Madame Montessori.

9. "The Metric System in the Far East," by Howard Richards, Jr., Electrical Engineer, New York.

At the afternoon session, at which H. V. Arny, of New York, was chosen as temporary chairman, while Jeannot Hostmann, of New York, acted as temporary secretary, the following delegations were present:

From the National Wholesale Grocers' Association: F. R. Drake, of Easton, Pa.; Alfred H. Beckmann, F. N. Fiske and Arthur P. Williams, of New York.

From the Pan-American Union: William C. Wells, of Washington.

From the National Wholesale Druggists' Association: A. W. Miller, of Philadelphia; Thomas F. Main and Wm. Jay Schieffelin, of New York.

From the Philadelphia Bourse: Emil P. Albrecht.

From the American Chemical Society: H. V. Arny, of New York; H. P. Talbot, of Cambridge, Mass.; and Eugene C. Bingham, of Easton, Pa.

From the National Association of Retail Druggists: J. J. Tobin, of Boston; O. W. Osterlund, of Philadelphia; T. S. Armstrong, of Plainfield, N. J.; and Louis Berger, of New York.

From the American Institute of Electrical Engineers: Arthur E. Kennelly, of Cambridge, Mass.

From the American Institute of Chemical Engineers: George W. Thompson, of Brooklyn; and David Wesson, of Montclair, N. J.

From the National Association of Manufacturers of Medicinal Products: George Simon, of New York.

From the American Institute of Mining Engineers: George F. Kunz, of New York.

From the New York Branch of the American Pharmaceutical Association: Jacob Diner and Jeannot Hostmann, of New York.

From the National Association of Leather Belting Manufacturers: Louis W. Arny, of Philadelphia.

In addition, a number of metric advocates not representing any specific organizations were present and took part in the proceedings.

The Chairman appointed Messrs. Drake, Miller, Richards, Diner and Simon a committee on organization. Letters of regret were read from a number of metric advocates who were unable to attend. These were followed by papers from Henry G. Bayer, of New York, and Joseph W. England, of Philadelphia; these being followed by an informal talk by Madame Montessori on the practical use of metric units in Italy.

The Committee on Organization then presented a constitution and a set of by-laws, which after some amendments were adopted and the American Metric Association was thus definitely launched.

A nominating committee consisting of A. H. Beckmann, of New York, A. E. Kennelly, of Cambridge, Mass., and Eugene C. Bingham, of Easton, Pa., brought in the following names for officers of the association for the coming year: *President*, George F. Kunz, of New York; *Vice-Presidents*, Wm. Jay Schieffelin, of New York, Emil P. Albrecht, of Philadelphia, and Orrin E. Stanley, of Portland, Oregon; *Secretary*, Howard Richards, Jr., of New York; *Treasurer*, Arthur P. Williams, of New York. All of these gentlemen were elected by unanimous vote.

After adjournment, President Kunz appointed as members of the Executive Committee: S. W. Stratton, of Washington; F. R. Drake, of Easton, Pa.; H. V. Arny, of New York; A. E. Kennelly, of Cambridge, Mass.; and W. P. Wilson, of Philadelphia.

THE NATIONAL WHOLESALE DRUGGISTS' ASSOCIATION, CHICAGO, 1917.

Some days ago at a meeting of men connected with the wholesale drug trade and allied interests, Chas. E. Matthews, manager of Sharp & Dohme's Chicago house, was chosen chairman of the Committee on Arrangements and Entertainment, along with an Executive Committee, composed of the following well-known gentlemen: G. T. Bauer, Frank M. Bell, Frank A. Blair, A. R. Brunker, William Buss, L. J. Freundt, A. J. Horlick, F. Keeling, Jr., A. S. Levis, Jas. W. Morrisson, Harold Sorby.

Chairman Matthews has appointed a number of committees and later on hotel headquarters, date of convention, as well as other particulars, will be announced.

ANNUAL MEETING MINNESOTA PHARMACEUTICAL ASSOCIATION.

The Annual Meeting of the Minnesota Pharmaceutical Association was held February 13–15. As usual, an excellent program was provided. Dean F. J. Wulling presided over the Scientific and Practical Pharmacy Section. The Northwestern Branch of the American Pharmaceutical Association met jointly with this section. Part of the program presented follows:

1. A Symposium on the U. S. P. IX. Opened and closed by Mr. C. H. Bollinger, and on the N. F. IV, opened and closed by Mr. F. A. Upsher Smith.
2. Prescription Pricing, by Mr. Robert L. Morland.
3. The Prescription Counter, by Mr. R. Bartleson.
4. Prescriptions, and Prescription Compounding, by Mr. H. Martin Johnson.
5. Report of the Committee on Adulteration, by Prof. Gustav Bachman.
6. Fractional Percolation, by Mr. O. J. Blosmo.
7. (*a*) The 1916 Results of Medicinal Plant Cultivation for Educational Purposes at the College of Pharmacy, University of Minnesota.
   (*b*) A New Source for Ergot.
   (*c*) The Year Book and the JOURNAL OF THE A. PH. A.
   (*d*) Some Notes on Digitalis with Special Reference to *Digitalis lutea*, by Dr. E. L. Newcomb.
8. The College of Pharmacy, University of Minnesota (Historical), by Dean F. J. Wulling.
9. Report of Committee on College of Pharmacy, by Chairman A. J. Kline.
10. An Exhibit of the New U. S. P. IX Preparations.

Thursday afternoon Professor Henry Kraemer, of the Philadelphia College of Pharmacy, delivered an illustrated lecture on Pharmacognosy in its Relation to the Practice of Pharmacy.

The Northwestern Branch of the A. Ph. A. held its Annual Meeting to elect officers for the ensuing year, immediately following the adjournment of the joint meeting.

MINNESOTA PHARMACEUTICAL ASSOCIATION DESIRES BACK NUMBERS OF VARIOUS STATE PROCEEDINGS.

Secretary E. L. Newcomb, of the Minnesota State Pharmaceutical Association, advises that they are having the proceedings of all State Associations bound, and in order to complete these files they desire some back numbers of nearly all the associations. Undoubtedly the secretaries have been advised, but frequently their files are not complete, or have only those required by them; individual members may have them and will be glad to be of assistance. Please write Professor Newcomb, care of the College of Pharmacy, University of Minnesota, and advise him of the proceedings of your association that you can supply.

PHILADELPHIA DRUG EXCHANGE HOLDS FIFTY-SEVENTH ANNUAL MEETING.

At the annual meeting of Philadelphia Drug Exchange, held January 23, the following officers were elected:

President, John Fergusson; *Vice-President*, Harry B. French; *Treasurer*, Anthony M. Hance; *Secretary*, Joseph W. England; *Directors*, Charles E. Hires, A. Robinson McIlvaine, Dr. Adolph W. Miller, Harry K. Mulford, Adam Pfromm, Clayton F. Shoemaker, Richard M. Shoemaker and Walter V. Smith.

The annual report was presented by Clayton F. Shoemaker, and reviewed trade conditions and a look into the future. The conclusions as well as the review were optimistic.

An elaborate banquet was served at the Bellevue-Stratford, January 25. A fine musical

program was rendered and the speakers of the occasion were Dr. William E. Hughes, Dr. John G. Wilson, Thomas A. Daly, poet, and Ernest Trigg, President of the Philadelphia Chamber of Commerce. The address by Dr. Hughes was on Japan, and profusely illustrated with lantern slides. The doctor, wife and daughter spent last summer in Japan and the views were taken and afterward colored by them; therefore the personal touch was evident throughout and added materially to the very interesting lecture.

DR. GEORGE E. VINCENT HEADS ROCKEFELLER FOUNDATION.

Dr. George E. Vincent, head of the University of Minnesota, has been elected president of the Rockefeller Foundation.

Charles E. Hughes, of New York, Julius Rosenwald, of Chicago, and Dr. Wallace Buttrick, secretary of the General Educational Board, were elected trustees.

Edwin Rogers Embree, assistant secretary of Yale University, was elected secretary of the Foundation, succeeding Jerome D. Green, and John D. Rockefeller is chairman of the board of trustees.

TWENTY-FIFTH ANNIVERSARY OF PROF. GEO. C. DIEKMAN'S PROFESSORSHIP IN NEW YORK COLLEGE OF PHARMACY FACULTY.

A testimonial banquet was tendered Dr. Geo. C. Diekman, celebrating the Twenty-fifth Anniversary of his membership on the faculty of the New York College of Pharmacy, January 23. The happy affair was provided in the spacious dining room of the New York Drug and Chemical Club, which presented an over-flow gathering of pharmacists, physicians, chemists and friends of the honored guest.

Prof. C. F. Chandler presided as toastmaster. Many letters of congratulation were read from those who could not attend the function.

Presentation speeches were made by Dr. H. H. Rusby, Mr. Thomas F. Main, Dr. Pasquale Guerrieri and Mr. Keenan. Quite a number of the guests were called upon and spoke of the affectionate regard and high esteem in which the honored guest is held by all who know him. Doctor Diekman, in responding, expressed his deep appreciation of the honors bestowed upon him and the recognition his friends had given to his services, that he valued beyond expression the friendship and assistance of his associates in the various activities he was engaged.

STUDENTS VISIT CHEMICAL EXHIBIT AT MUSEUM OF NATURAL HISTORY.

On Saturday, January 27, and Monday, January 29, the students of the Department of Pharmacy and Dentistry of the College of Jersey City, visited the Museum of Natural History in New York City to inspect the Chemical Exhibit. This so-called "Exhibit of Chemical Preparations" has been arranged by the N. Y. Sections of the American Chemical Society, American Electrochemical Society and Society of Chemical Industry in conjunction with the Museum of Peaceful Arts. The following exhibits were of great interest to the students: Specimens of the various elements from their native state to their highest purity, the products of the electric furnace and from the air, which are of great value industrially, the coal-tar products, developed to a great extent in the United States, the medicinal products and dyes now manufactured in our country, the explosives exhibit, and the exhibition of metric weights and measures by the Bureau of Standards.

The historical exhibits of Joseph Priestley, of Lavoisier, of Pasteur and of Ramsay, also proved a great attraction. The students were accompanied by Dr. Otto Raubenheimer, professor of pharmacy and chemistry, and Dr. Emil Roller, director of the laboratories, who explained the various exhibits.

THE PHARMACIST AND THE LAW.

PHARMACY LAW PROVISIONS.

The following portions of suggestions for pharmacy law amendments or new laws are taken from the report of the Legislative Committee of the National Association of Boards of Pharmacy:

College Graduation Prerequisite.

On and after July 1, 1919, an applicant for examination as registered pharmacist must be twenty-one years of age, of good moral character and temperate habits, a graduate from a college of pharmacy, school of phar-

macy or department of pharmacy of a university which is recognized by said board, and furnish proofs of four years' experience. Actual time of attendance at the school or college of pharmacy from which the applicant is a graduate, but not to exceed two years, shall be accredited upon the required service of four years. The remainder of the experience required must have been in compounding and dispensing drugs, medicines and poisons under the supervision of a registered pharmacist in a drug store or pharmacy where the prescriptions of medical practitioners are compounded.

By omitting date and adding a proviso, as follows, the law may be made effective earlier:

Provided however, that an applicant who is registered as an apprentice or as an assistant pharmacist by said board at the time of the taking effect of this amendatory act shall not be required to furnish any proofs of attendance at a recognized school of pharmacy, college of pharmacy, or department of pharmacy of a university.

Reciprocity Clause.

The said Board of Pharmacy may, in its discretion, grant certificates of registration as registered pharmacists to such persons as shall furnish with their applications satisfactory proof that they have been registered by examination in some other state requiring a degree of competency equal to that required of an applicant in this state. Provided, however, existing requirements in this state shall not prevent the said Board of Pharmacy of this state from granting reciprocal registration to applicants whose experience, and results of examination, together with the proofs of qualifications upon which they were permitted to take the examination at the time of their registration in the states from which they apply, would have entitled them to registration as a registered pharmacist in this state at that time.

Note: It having been authoritatively held that State Boards can not make retroactive ruling, the above proviso is inserted so that applicants who were fully entitled to registration in this state at the time they were registered in the state from whence they apply may not be excluded from reciprocal registration because of subsequent change in the requirements of this state, such for instance as a prerequisite college graduation requirement.

The following are further suggestions relative to other portions of the draft:

Care should be exercised in not recognizing colleges or schools of pharmacy that do not provide for at least a two years' course in a recognized high school as a matriculation requirement, the object being to lead to a four-year high school, graduation requirement, at as early a date as possible, not later than January 1, 1920, in accordance with a recommendatory resolution adopted by the N. A. B. P. Convention held in San Francisco in 1915.

A provision of law creating the rank of Assistant Pharmacist will help materially to solve the problem of scarcity of clerks. At the same time it makes it possible for a registered pharmacist to temporarily leave his store in charge of an employee who is authorized by law of the state to conduct the business. Experience in states that make provision for the registration of Assistant Pharmacists has demonstrated that many clerks of this rank do not aspire to higher registration, but are content to accept good salaries and remain in the Assistant Pharmacist ranks. Candidates for assistant registration should be given specially prepared examination papers along decidedly practical lines and should include actual compounding of prescriptions.

The United States Pharmacopoeia and the National Formulary are recognized by the Federal Government in its enforcement of the Food and Drug Act, and are used as standards by the Medical Departments of the United States Army and Navy, and also by Medical and Pharmaceutical Colleges. In order to have legal recognition in the various states these books should be legalized by state laws which should also make it mandatory that every drug store or pharmacy be supplied with copies of the latest editions.

IT IS NOT GOOD POLICY TO SPECIFY IN A LAW THE SUBJECTS IN WHICH APPLICANTS MUST BE EXAMINED AND THE GRADES THEY MUST MAKE IN ORDER TO SECURE CERTIFICATES. By giving Boards of Pharmacy authority to make by-laws, they can meet all such matters as they arise, thus keeping pace with ever-changing conditions and insuring up-to-date examinations.

Members of legislative committees are also again referred to the report of the Voluntary Conference on Modern Pharmacy Law, in the December and January issues of the JOURNAL A. PH. A.

CHANGES OF ADDRESS.

All changes of address of members should be sent to the General Secretary promptly.

The Association will not be responsible for non-delivery of the Annual Volume or Year Book, or of the JOURNAL unless notice of change of address is received before shipment or mailing.

Both the old and the new address should be given thus:

HENRY MILTON,
From 2342 Albion Place, St. Louis, Mo.
To 278 Dartmouth St., Boston, Mass.

Titles or degrees to be used in publications or in the official records should be given, and names should be *plainly* written, or typewritten.

CHANGE OF ADDRESS SINCE DECEMBER 18, 1916.

SENECAL, H. C.,
From Vancouver Barracks, Wash.
To Camp Hosp., Calexico, Cal.

JOHNSON, H. M.,
From 1110 Payne Ave., St. Paul, Minn.
To 4th & St. Peter Sts., St. Paul, Minn.

WINSKI, F. B.,
From Stamford, Conn.
To 1637 Warren Ave., Chicago, Ill.

BURKETT, K. S.,
From 838 Ridge Ave., Pittsburgh, Pa.
To 1620 Antrim St., Pittsburgh, Pa.

DISSOSWAY, T. N.,
From 23 Vine St., Brooklyn, N. Y.
To 426 E. 4th St., Brooklyn, N. Y.

COUSINS, W. H.,
From 1804 Jackson St., Dallas, Tex.
To 1314 Wyoming St., Dallas, Tex.

KANTROWITZ, HUGO,
From 105 W. 94th St., New York, N. Y.
To 600 W. 178th St., New York, N. Y.

MAYER, P.,
From 111 W. State St., Marshalltown, Ia.
To 103 N. 2nd St., Marshalltown, Ia.

STONE, C. G.,
From 273 Rich Ave., Mt. Vernon, N. Y.
To 192 Front St., New York, N. Y.

DARBAKER, L. K.,
From 415 N. Highland Ave., Pittsburgh, Pa.
To 7021 Bennett St., Pittsburgh, Pa.

GRAHAM, W.,
From 7420 Sprague St., Mt. Airy, Philadelphia, Pa.
To 35 Poplar St., Philadelphia, Pa.

STROUP, A. L.,
From 205 N. Main St., Pueblo, Colo.
To Cor. Northern & Evans Ave., Pueblo, Colo.

BUSCH, H. P.,
From 324 S. 17th St., Philadelphia, Pa.
To The Gladstone, 11th & Pine Sts., Philadelphia, Pa.

KIRK, H. S.,
From 519 J St., Sacramento, Cal.
To 919 Front St., Sacramento, Cal.

TODD, A. M.,
From 204 N. Rose St., Kalamazoo, Mich.
To 323 N. Rose St., Kalamazoo, Mich.

CHARRON, R. C.,
From 426 Newbury St., Boston, Mass.
To 164 Strathmore Rd., Suite 8, Brighton.

LUCK, J. A. W.,
From 2433 Telegraph Ave., Berkeley, Cal.
To Chem. Lab., Univ. of Cal., Berkeley, Cal.

SNOW, C. M.,
From 74 E. 12th St., Chicago, Ill.
To 701 S. Wood St., Chicago, Ill.

KRIEGER, J. C.,
From 118 Main St., Salamanca, N. Y.
To 104 Broad St., Salamanca, N. Y.

PFEIFFER, G. A.,
From 639 N. Broad St., Philadelphia, Pa.
To 115 E. 29th St., New York, N. Y.

SMITH, MARY L.,
From Waverly, Kans.
To Residence Unknown.

BRADLEY, J. F.,
From 1443 Ogden Ave., Chicago, Ill.
To Residence Unknown.

WALL, J. R.,
From 50 W. 12th St., New York, N. Y.
To Residence Unknown.

GIBSON, F. L.,
From 4141 Clarendon Ave., Chicago, Ill.
To U. S. Public Service, Washington, D. C.

WATSON, WM., JR.,
From 45 Howard Ave., Utica, N. Y.
To 1117 Howard Ave., Utica, N. Y.

SCHAEFER, HUGO H.,
From 198 Jefferson Ave., Brooklyn, N. Y.
To 115 W. 68th St., New York, N. Y.

MCMAHON, JOSEPH,
From 2737 E. 26th St., Sheepshead Bay, Brooklyn, N. Y.
To 2755 E. 26th St., Sheepshead Bay, Brooklyn, N. Y.

STURMER, J. W.,
From 1715 Cherry St., Philadelphia, Pa.
To 601 Lees Ave., Collingswood, N. J.

FLETCHER, J. M.,
From Oak Cliff Pharm. No. 1, Dallas, Tex.
To 901 W. Jefferson St., Dallas, Tex.

HAMANN, WM. A.,
From 1101 E. Front St., Muscatine, Ia.
To 100 William St., New York, N. Y.

PALMER, J. C.,
From 4703 18th St., Seattle, Wash.
To 203 Bagley Hall, Univ. of Wash., Seattle, Wash.

DAME, R. D.,
From Stratton, Neb.
To Deadwood, S. Dak.

HESSLER, E. H.,
From 2016 N. 17th St., Philadelphia, Pa.
To 4625 Camac St., Philadelphia, Pa.

OUELLET, E. J.,
From 28 William St., Cambridge, Mass.
To 781 Tremont St., Boston, Mass.

ADAMS, C. H.,
From 402 Upper Main St., Henderson, Ky.
To c/o Fogas Drug Store, Mt. Vernon, Ind.

HENRY, A. M.,
From Homestead, Fla.
To Tallahasse, Fla.

STEWART, H. E.,
From Box 218, Jacksonville, Fla.
To 1090a, Jacksonville, Fla.

MALLARD, A. E.,
From 287 Woodward Ave., Detroit, Mich.
To 30 Adams Ave., Detroit, Mich.

SMITH, I. C.,
From Ocilla, Ga.
To St. Augustine, Fla.

DUMEZ, A. G.,
From 612 Howard St., Madison, Wis.
To 135 W. Gilman St., Madison, Wis.

CHURGIN, J. S.,
From 2023 Washington Ave., New York, N. Y.
To 1070 Washington Ave., New York, N. Y.

WAR DEPARTMENT.

List of changes of station during January, 1917, in the cases of Sergeants First Class, and Sergeants, Medical Department.

SERGEANTS, FIRST CLASS.

William S. Howson, from the U. S. A. Transport "Sumner," to Jackson Barracks.

Algernon van Aller, from Fort Wood, to Fort Warren.

Louis F. Seith, from Fort Warren, to Fort Wood.

SERGEANTS.

Raymond F. Harding, from Fort Bayard, to the Philippines Department.

John Eiler, from the Army & Navy General Hospital, to the Philippines Department.

James D. Miller, from the Southern Department, to Columbus Barracks.

Byron R. Gates, from the Hawaiian Department, to the Southern Department.

Charles H. Dabbs, from the Southern Department, to Fort Hamilton.

Ignatius B. Thomas, from the Army Medical School, Washington, D. C., to Southern Department.

John C. Barry, from Columbus Barracks, to the Southern Department.

BOOK NOTICES AND REVIEWS.

A Manual of Materia Medica and Pharmacology. Comprising all organic and inorganic drugs which are or have been official in the United States Pharmacopoeia, together with important allied species and useful synthetics, especially designed for students of pharmacy and medicine, as well as for druggists, pharmacists, and physicians. By David M. R. Culbreth, Ph.G., M.D., professor of botany, materia medica, and pharmacognosy in the Maryland College of Pharmacy, department of the University of Maryland, Baltimore, Md. Sixth edition, with four hundred and ninety-two illustrations. Lea and Febiger, Philadelphia and New York, publishers. Price, $5.25.

The extensive use of this book for teaching and reference purposes has been merited by the able and comprehensive manner in which the author treats the various subjects included in the above title.

The chapters devoted to administration, application and modified action of drugs give the student an understanding of those fundamentals so essential to the study of pharmacology.

Drugs from the vegetable kingdom are

arranged according to natural orders beginning with the lower forms of life, the next related following in sequence. The etymology of names employed, descriptions, commercial discussion, adulterations and allied drugs are treated from the standpoint of the pharmacognosist and contribute largely to the practical value of the work. Drugs of animal origin are arranged in accordance with zoölogical sequence and discussed in a like manner. Inorganic drugs and carbon compounds are arranged according to chemical relationship.

This edition has been made to conform to the changes in the ninth revision of the United States Pharmacopoeia and includes most of the drugs and preparations of the National Formulary, fourth edition.

Drugs and preparations of the National Formulary are not accredited to the N. F. drugs being discussed under allied plants, Dulcamara as allied to Capsicum, nor are the definitions and descriptions those of the N. F. Preparations are listed under unofficial preparations, due credit being given to the British Pharmacopoeial preparations only. Unofficial preparations under Senna are listed as Confection, Extract, Infusum Sennae, (Br.) Aromatic Syrup, Compound Syrup, Tinctura Sennae Composita, (Br.) Species Laxativae. The National Formulary should receive due recognition.

Plant descriptions have been partly rewritten and include added descriptions of powdered drugs. The manufacture of official preparations are given as heretofore but volume quantities are expressed in milliliters, the abbreviation Ml being used. The same in dosage; *e. g.*, Fluidextract of Ergot, dose m. xv–lx (1–4 Ml. (Cc.)). The use of this abbreviation will be confusing to a degree in that it will not conform in this respect to works on allied subjects. Assay processes have properly been omitted. The list of plant constituents has been revised to conform with recent knowledge of plant composition.

The inorganic and organic carbon compounds have been revised to conform to the U. S. P. and N. F., while a number of non-pharmacopoeal organic compounds have been added.

The chapters devoted to the microscope and in the appendix the discussion on poisons and the various tables of weights and measures, doses, etc., remain the same as in the previous edition.

In a work of this kind doses should occupy a position of major importance. Unfortunately they are obscurely placed without having been given due prominence.

Therapeutic properties and uses of drugs have not been revised but have been rewritten. This has not been an improvement as the sentences are longer and more involved, making it difficult for the student to grasp their meaning.

The intent of the author to "bring all subjects within current scientific thought," has not been carried out in respect to the properties of drugs. In the light of modern researches in pharmacodynamics many terms and statements are inaccurately applied or are misleading.

Sanguinaria "in small doses excite the stomach, while large doses nauseate and depress the pulse; full doses vomit actively."

Belladonna "increases peristalsis by paralyzing terminations of involuntary intestinal muscles; dilates pupil, increases pulse and urine by paralysis."

Serpentaria is described as having the following properties: "Stimulant, tonic, diaphoretic, diuretic, emmenagogue, aphrodisiac, antiperiodic, like calumba promotes appetite, digestion, increases bronchial and intestinal secretions, heart action, mental exhilaration."

Such statements are not applicable to a drug that should be classed as an aromatic bitter.

Taraxacum, a drug conceded to be therapeutically useless, is said to be "diuretic, tonic, stomachic, aperient, deobstruent. Uses: Congestion and inflammation of the liver and spleen, dyspepsia, constipation, consumption, skin affections, dropsies, substitute for coffee."

These instances, selected at random, show that this important part of the book did not receive the attention to which it was entitled. This detracts somewhat from the value of an otherwise excellent book.

C. A. DUNCAN.

Publications Received.

Proceedings of the American Association of Pharmaceutical Chemists, Ninth Annual Meeting, held at Cedar Rapids, Ia., May 29 to June 1, 1916.

Reports of the Twenty-Sixth Annual Meeting of the South Dakota State Board of Pharmacy, and Thirty-First Annual Convention of the South Dakota State Pharmaceutical Association, held at Mitchell, August 8–11, 1916.

Twenty-Eighth Annual Report of the Louisiana State Board of Pharmacy, May 8, 1916.

JOURNAL ANNOUNCEMENTS.

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